

ANGLIA RUSKIN UNIVERSITY

A CRITICAL ANALYSIS OF ACADEMIC SKILL
DEVELOPMENT OPPORTUNITIES FOR
ONLINE DISTANCE LEARNING STUDENTS
AT A UK UNIVERSITY

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ABSTRACT

FACULTY OF HEALTH, SOCIAL CARE AND EDUCATION

PROFESSIONAL MASTER'S (EDUCATION)

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This mixed methods study focuses on the academic skill development opportunities available to online distance learning students at a UK university. Educators and researchers advocate contextualised teaching and learning strategies to meet individual student needs, yet most universities provide generic study skills support services. Furthermore, academic skill development should be embedded within course curricula to ensure it is contextualised and delivered at the point of need. This research study contributes to the body of knowledge and extends it by uniquely capturing the voice of online learners using fully online research methods. This study reveals online distance learning students' preferences for academic skill development opportunities; something not available in the existing literature.

A sequential mixed methods approach was employed utilising online methods of data collection. Quantitative data were collected via an online questionnaire using Survey Monkey in strand 1. In strand 2, qualitative data were generated via online, audio-visual, semi-structured interviews hosted using Adobe Connect.

The strand 1 data revealed online distance learning students prefer academic skill development opportunities involving one to one interaction. Students also access internet resources in preference to university resources and they perceive librarian support to be unavailable. The strand 2 data confirmed students perceive benefit in accessing opportunities for 'human' interaction, whilst text-based information presents challenges on their time. Embedding of academic skill development opportunities within curricula was not explicit. Importantly, students were of the opinion the academic skill development opportunities had contributed to their academic and personal development.

This study concludes university generic skill support services do not effectively meet the needs of online distance learning students. The findings indicate text-based resources should be replaced by more interactive opportunities. Students' preferences for opportunities for one to one interaction may not be economically viable on a university scale, but embedding on a modular or course basis may be more feasible.

Key words: academic skill development; online distance learning; embedding; mixed methods

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Glossary

ALSS – Faculty of Arts, Law and Social Sciences

CPD – Continuous professional development

FHSCE – Faculty of Health, Social Care and Education

FMS – Faculty of Medical Science

FST – Faculty of Science and Technology

HEFCE - Higher Education Funding Council for England

HEI – Higher education institution

LAIBS – Lord Ashcroft International Business School

NSS – National Student Survey

ODL – Online distance learning

PIS – Participant information sheet

QAA – Quality Assurance Agency

VLE – Virtual learning environment

Chapter 1 An introduction to academic skill development for online distance learning students

1.1 Introducing the researcher

In 2004 I embarked on a major career change when I was invited to apply for a senior lecturer post to teach radiotherapy on a distance learning course. I was thrilled at this new opportunity and having worked as a therapeutic radiographer for over 20 years I was ready to make the transition to another career. However, I had no experience of education (other than teaching clinical practice to student radiographers) and I certainly had no knowledge, understanding or experience of distance learning. Since 2005 I have been course leader of work-based, online distance learning (ODL) courses. In 2010 the radiotherapy course was discontinued and I am currently the course leader of two undergraduate courses in leadership and management in health and social care. My role has enabled me to nurture students through their learning journey, but it has also provided insight into the challenges faced by students who study remotely from the university. I have a particular interest in developing robust support mechanisms for ODL students; an interest undoubtedly derived from teaching undergraduate level students as well as my nurturing personality.

Phillips, et al. (2004) argue that effective student support is a significant factor in addressing student retention, although Pickar and Marshall (2008) believe student support and retention remain a challenge for distance learning tutors. Campus-based students at the higher education institution (HEI) at which I work have access to a wide range of resources and support staff to aid the development of their academic skills. Resources are becoming more widely available for the ODL students in the form of online study guides, videos and podcasts, but students do not have the same opportunities for one to one tutorials to help with academic writing, referencing and literature searching. In my own course this support is provided by module staff and whilst staff enjoy this aspect of teaching it is perceived to be extremely resource intensive. Van de Vord and Pogue (2012) suggest the literature is inconclusive in supporting this perception, although Worley and Tesdell (2009) appear to concur the overall time spent with individual students is much greater in ODL courses, primarily due to the one to one communication required. This is certainly my experience and although the number of students recruited to some of this HEI's ODL courses is much smaller than campus-based courses, with a corporate strategy for increasing off campus provision I suggest there is a clear need to explore more effective ways of providing study skills support and, more especially, methods which are positively received by students.

1.2 Introducing the local context

Online distance learning courses continue to grow in number (Bolliger and Inan, 2012) and at the HEI at which I work an increase in the provision of distance learning courses has been targeted in successive Corporate Plans (Anglia Ruskin University, 2009; Anglia Ruskin University, 2012). Whilst I applaud these corporate goals, my experience as a course leader of work-based distance learning courses leads me to question whether the infrastructure exists to support this initiative. Progress appears to be largely ad hoc without a clear institutional strategy and my perception is that a lack of parity exists across the portfolio of distance learning courses. Simpson (2008) and Ehlers (2004) argue teaching and learning strategies should be contextualised to meet individual student needs, thus variance across distance learning deliveries within the institution will occur. Clearly it is not feasible or viable for universities to provide multiple systems or processes for different contexts; hence Lentell (2012) advocates institutional policies, guidelines and models which are pedagogically underpinned and offer well-defined parameters which can be contextualised.

A key part of my role involves supporting students in their development of academic skills. The university provides an array of support for all students, but tutorial support to facilitate the development of academic skills is largely targeted at campus-based students or those who can access the campus. Thus distance learning tutors need to become adept at developing innovations to meet the needs of their students. Whilst I firmly think innovation should be encouraged, I also hold the view that it is impossible to effectively evaluate students' experiences of ODL courses within this HEI whilst variations in practice exist. From a constructivist stance I believe all students' experiences *will* be different even if all aspects of teaching and learning are identical across courses. However, I consider it would be advantageous to standardise some generic support mechanisms such as tutorial access with university librarians and skill support staff by ensuring they are accessible to *all* students, irrespective of their location. Furthermore, online resources should be appropriate for students learning off campus, with robust operational and administrative arrangements underpinning them. Lentell (2012) shares this view, arguing the importance for senior management recognition of the different pedagogical requirements for online learning, and the necessity for students and their context (online learning) to be at the centre of the system. Jung and Latchem (2007) suggest most institutions apply the same quality criteria for e-learning as for the other modes of delivery, which I find disappointing considering the prevalence of e-learning worldwide. Clearly it is impossible to ensure all students have the same experience, but it should be feasible to increase the potential for a positive experience for all ODL students by developing greater equity between ODL courses, as well as working towards parity in the opportunities available to ODL and campus-based courses.

In the absence of an effective ODL infrastructure and consistent support mechanisms within this HEI, my perception is that students' experiences of their distance learning courses could be improved. Lack of parity in academic skill development opportunities available to distance learning students has the potential to influence their experience of their university course and ultimately their response to the National Student Survey (NSS), arguably the most influential student 'voice' with significant impact on a UK university's place in national and international league tables (Gaskell, 2011). As a result of this, my perception is not only a lack of parity and equity between the experiences of distance learning students, but also potential lack of efficiency in the use of resources with significant impact on the university in attracting and retaining students.

Distance learning has many guises and this is epitomised within the HEI at which I work, where 'distance learning' delivery encompasses courses requiring some form of campus-based attendance such as induction and workshops, to those offering a totally remote delivery. The context of my distance learning courses is they are delivered entirely by online distance learning using the university virtual learning environment (VLE). There is no requirement to attend campus and support is provided online; including induction and tutorials. Students are geographically dispersed, both within the UK and internationally, and on that basis the teaching and learning strategies offered to students are equitable. However, some students very occasionally choose to access on-campus student support services by coming on to campus if they live within a reasonable distance of the university; something which Duranton and Mason (2012, p.81) refer to as the "logistical convenience" of ODL. In my experience, the reasons students give for accessing on-campus resources vary, but include a preference for using hardcopy books rather than digital resources, or to take advantage of student services tutorials such as referencing workshops. Participants in this research study also occasionally chose to attend on-campus student support services and this is detailed in chapter 5. Whilst this on-campus attendance was clearly individual student choice, it further emphasises some of the inconsistencies and demonstrates that students may be disadvantaged simply by their location. Any potential variance in 'attendance' for students registered on courses identified by the university as 'distance learning' was unknown at the outset of this research study. However, in view of the fact courses were recorded as 'distance learning', the assumption was made that the majority of student learning would be undertaken off campus. This decision influenced the research design (Chapter 3) and the choice of methods of data collection, with the need to ensure accessibility for all participants.

I acknowledge it is challenging for HEIs to develop quality teaching and learning strategies to meet the needs of hugely diverse groups of students, but as a pragmatist I

believe it is important to develop teaching and learning tools specifically for distance learning delivery and which *students* perceive as contributing to their academic and personal development.

1.3 Students' perception of quality in higher education

Doherty (2008) claims the concept of quality is frequently misinterpreted and misunderstood by academics, which is perhaps unsurprising in the absence of a clear definition. What is evident is that "quality is defined differently by each person or sector in a subjective, stakeholder-related manner" (Bernhard, 2011, p.44). Turner (2012) argues it is impossible to compare the quality of individual students' experiences because of the variance in expectations between those individuals. This seems to imply that understanding quality as a concept is not necessarily the greatest challenge, but rather the need for HEIs to understand and respond to diverse students' expectations. However, students' experiences of their university course and their expectations are potentially very different. Gilroy, et al. (2001) purport higher education provision should match student expectations to ensure quality of the student experience. Dearnley (2003) argues students will initially base their needs on their previous educational experience. Consequently any form of self-assessment at the start of their course may not truly represent students' needs for distance learning because they have no understanding of what to expect from this style of learning.

For students the key factors affecting the quality of their learning experience are processes for supporting their learning: primarily tutor guidance and motivation, student-teacher communication tools and an effective learning environment (Duranton and Mason, 2012; Shillington, et al., 2012). Further determinants of quality specific to distance learning include tutor availability, response time, communication, students' technical ability and the course learning environment (Liaw, 2008). Learner support is recognised as a key factor in student retention (Phillips, et al., 2004). Motteram and Forrester (2005) and Dawn, et al. (2008) also suggest frequent interactions with tutors promote a feeling of belonging to the university, whilst Shin (2002) claims students' success can be influenced by effective interaction with tutors and support staff. Tutor interaction with students therefore has the potential for significant impact not only on student success, but also for the reputation of HEIs. Consequently some sort of 'human' involvement for facilitating students' development of their academic skills would appear to be highly important.

1.4 The 'typical' distance learning student

Distance learning courses provide flexible learning and an opportunity for higher education study which might not otherwise be attainable for some students. A direct result of this flexibility means students are frequently 'mature' learners in full or part-time employment, from diverse educational and cultural backgrounds and with wide-ranging personal commitments which impose significant constraints on their time (Dearnley, 2003; Duranton and Mason, 2012). However, Lehman and Conceicao (2014) report the ODL student profile is changing as a result of increased ownership and use of technology. They suggest ODL courses are studied by various age groups and claim the percentage of students 30 years and younger will increase as students become more experienced with online education prior to university. This may well be the case, but I would argue HEIs should not make assumptions about students' level of technological expertise based upon their age. Currant, Currant and Hartley (2011, p.212) seem to support this view, arguing "that students are not one homogeneous group of 'tech-savvy' learners". In my experience I have known 'mature' students cope well with the online learning environment, whilst in contrast, younger students have sometimes struggled.

Online distance learning students tend to be highly motivated, primarily resulting from the opportunity for studying that distance learning affords (Smith, 2004; Dearnley, 2003; Dabbagh, 2007). Despite their motivation, students often experience considerable self-doubt in their academic ability; a feature common to non-traditional students (Burns and Sinfield, 2004) and maintaining this motivation is a key factor in students overcoming feelings of self-doubt. Chen and Jang (2010) claim tutor support, guidance and feedback are critical to distance learning students' motivation. Simpson (2008; 2012) agrees, but suggests support for learners based on identifying and rectifying weaknesses (what he calls remediation) and counselling students on the development of learning skills potentially sets up more barriers for students by demoralising them. The strategy of student self-referral is considered ineffective because weaker students who need the services tend to refer themselves the least. Simpson (2008; 2012) argues tutors should adopt a more proactive approach to motivate students; characterised by tutors initiating contact with learners as opposed to waiting for students to make contact. I concur with this view but am also of the opinion that mechanisms for student support should not merely focus on student weakness, but should provide opportunities for academically strong students to enhance their skills. A proactive strategy for contacting students promotes engagement in opportunities for academic skill development for all students, irrespective of their level of academic capability.

1.5 Definition of academic skills

Students need to acquire a variety of skills at university; in part so that they are successful in communicating their knowledge in assessment, but also to facilitate their development of transferrable skills for employment (Drew and Bingham, 2010). The Quality Assurance Agency's *Framework for Higher Education* (2008) refers to 'skills clusters': self-management skills; data and knowledge acquisition skills; interpretive, critical and analytical skills; and communication skills. Cottrell (2013) more explicitly categorises academic skills as core research skills (reading, note-taking and managing information), critical analytical thinking, memory and confidence with numbers. The QAA (2015, p.16) require HEIs to "consider the ways in which they can enable students to develop their academic potential through the development of appropriate academic skills such as reasoning, research, numeracy, writing and referencing". In practice, many HEIs provide 'bolt on' as opposed to 'built in' study skills support (Bennett, Dunne and Carré, 2000). More recently, Wingate (2010) refers to the provision of 'extracurricular' sessions which provide generic writing advice to 'at risk' students. Support is often provided in generic sessions by learning experts as opposed to course tutors, but Durkin and Main (2002) and Tran (2013) suggest students tend to avoid generic skills support sessions because they do not perceive them as relevant to their subject. Bell (2011, p.146) acknowledges generic skills support sessions have their limitations, but she considers they play an important role, hence most universities maintain these services because they are a "vital area of support". However, Wingate (2007) argues that knowledge construction is discipline specific and therefore subject tutors should support students rather than learning experts. Clughen and Connell (2011) agree, but highlight the challenges in engaging tutors in this aspect of students' support, not least because tutors may not be sufficiently skilled as writing experts. Alternatively, Bell (2011) suggests learning developers are uniquely placed to work collaboratively with tutors, students and support staff to develop writing activities which are subject or content specific and thus more useful for students. QAA guidelines appear to focus on 'skills for passing a higher education course' as opposed to taking a more holistic stance of skills for personal, academic and professional development (Cottrell, 2013). Whilst this might appear a cynical viewpoint, I believe it to be an important consideration since it is QAA guidelines which underpin course construction and delivery.

In the absence of an agreed definition of 'academic skills', this research study will focus on skills which promote or facilitate effective study and students' success in written assignments, including: literature searching, reading, note taking, time management, library skills, internet searching, identifying useful resources, writing skills, referencing skills, planning assignments, evaluating literature sources and writing critically. The reason for this focus is not a personal belief that 'academic skills' are purely for facilitating

attainment of a university degree, but rather that this is a term colloquially understood by students who will be the participants in this study. In my experience students use phrases to describe themselves such as 'not being very academic' or 'not being able to write in an academic way'. However, since participants' understanding of this term is key to the research study, clarification will be sought within the data collection methods (*Appendix 4* and *Appendix 6*) and discussed in the results (*Chapters 4* and *5*). This research will therefore seek to establish ODL students' understanding of 'academic skills' and whether students at the HEI at which I work receive academic skill support from learning experts, course tutors or by videos and internet resources.

1.6 Overview of the research study

The purpose of this study is to identify academic skill development opportunities available to distance learning students at the HEI at which I work and to explore students' perception as to whether those opportunities make a positive contribution to their academic development. In seeking to understand academic skill development for ODL students, the study will address the following research questions:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

Supporting students' diverse needs requires skilled tutors (McPherson and Nunes, 2004) to provide motivation, emotional support and academic instruction. Tools to facilitate academic skill development should be embedded into the learning environment rather than being supplementary to it (Duranton and Mason, 2012), but tutors' skills in proactively directing students to appropriate learning resources at particular times are fundamental to students' success in becoming autonomous, self-directed learners (Ludwig-Hardman and Dunlap, 2003). It is unknown whether tutors at this HEI exhibit these skills. This research study does not seek to explore tutors' skills, but personal experience questions whether all tutors are skilled or appreciate the different requirements for teaching in an online environment, which may be one reason for the perceived lack of parity across the portfolio of distance learning courses.

Universities introduce study skills support in a variety of formats, yet these projects tend to be financially or technologically driven and may not meet students' needs or expectations. The online distance landscape is rapidly evolving in terms of technological

developments and although the VLE at the university at which I am employed is accessible via a range of mobile devices, the current VLE functionality has its limitations, including the lack of a responsive web design. Furthermore, the design of individual module VLE sites can be constrained by limitations in tutors' skills. Bell (2011, p.209) refers to locally controlled VLEs being a 'quick fix' for students whereby tutors "deposit their 'knowledge' in a format the student can 'collect' later – thus offering the 24/7 illusion". This resonates with my observation of some VLE sites which, although pockets of good ODL practice exist, remain primarily a repository for resources. For these reasons, the literature underpinning this research study has been reviewed through the lens of this university's current VLE provision and therefore focusses on VLE driven online learning as opposed to more contemporary developments such as mobile learning, where learning takes place through applications such as games, files, music, blogs and social networking. Lehman and Conceicao (2014) explain these technologies provide a more informal learning experience because learning is 'everywhere' as opposed to being in a single formal setting. Whilst I accept these technologies are used by some experienced tutors within the university's VLE, in my experience this is limited and the functional constraints of the VLE may well inhibit wider use by less experienced tutors.

Critical review of the literature has revealed a considerable body of research exists in the broad context of support for distance learning students and, more specifically, evaluation of technology and tools used to support students' academic development. Much of this research involved support for online learning, although in-depth critique of these sources revealed an element of student attendance such as blended learning or campus-based induction. Data collection frequently involved face to face interviews or focus groups; thus a gap in the literature exists with a focus on academic skill development for students who never attend campus. This research study will contribute to the body of knowledge and extend it by uniquely capturing the voice of online learners using fully online research methods. The uniqueness of the ODL student voice will be achieved by exploring their experiences with a variety of academic skill development opportunities as opposed to a single tool or technology, thus a holistic view of their preferences will be gained which is not available in the existing literature.

An outline of the following chapters is provided.

- Chapter 2: The literature concerning academic skill development for online distance learning students

This chapter presents a critical review of the literature and begins by explaining the context of 'study skill' support in universities. Students' preparedness for higher education and the concepts of students' experiences and expectations of higher education are examined. Determinants of quality in the ODL student experience are explored. The skills required by ODL students are outlined, with particular emphasis on the need for ODL students to be motivated, self-directed and autonomous learners. Good practice approaches to facilitate students' academic skill development are discussed, followed by the methods of 'study skill' support frequently adopted by HEIs. The conceptual framework is identified.

➤ Chapter 3: Methodology and theoretical approach

This chapter identifies the ontological stance underpinning this research study. The philosophical concept of pragmatism is discussed and the mixed methods approach utilised for this research study is explored in detail. The sequential mixed methods design is explained, the research participants are identified, together with the sampling strategies used for the quantitative (strand 1) and qualitative (strand 2) strands of the study, including the quantitative pilot. Methods for collecting data are explained: an online questionnaire for strand 1 and an online, audio-visual, semi-structured interview for strand 2. Results of the pilot study are presented. Data analysis techniques and tools are discussed. Factors affecting the reliability and validity of quantitative data and results and the trustworthiness and credibility of qualitative data and results are identified. The limitations of the study are outlined. The ethical considerations of this research study are considered.

➤ Chapter 4: Strand 1 results from online questionnaire

The strand 1 online questionnaire comprised closed questions designed to collect factual data about academic skill development opportunities accessed by students. Preliminary data were gathered about students' perception of the academic skill development opportunities in contributing to their academic development. This chapter presents the results from this questionnaire. Descriptive statistics were utilised to describe the characteristics of the sample and are illustrated via frequencies, mean, median and mode. Inferential statistics were utilised to establish if there was any statistically significant difference or relationship between two or more category variables using cross-tabulation Chi-square and correlation tests. Analysis of the quantitative data led to the emergence of six key findings.

➤ Chapter 5: Strand 2 results from online, audio-visual, semi-structured interview

The strand 2 online, audio-visual, semi-structured interviews facilitated the gathering of rich data from geographically remote students which might not otherwise be feasible due to cost or location. This chapter presents the results from these interviews as a narrative, with samples of quotations from participants to substantiate the story of students' experiences of developing their academic skills. Braun and Clarke's (2006) framework for thematic analysis was used to generate codes, themes and sub-themes in accordance with the conceptual framework. Analysis of the qualitative data led to the emergence of five key findings.

➤ Chapter 6: Discussion and integration of the QUAN and QUAL findings

Following the deconstruction of the quantitative and qualitative data in the previous two chapters, this chapter analyses, interprets and synthesises the integrated findings from strands 1 and 2. Four analytic categories are defined which provide a framework for this analysis and synthesis. The implications of the results and findings are discussed and ramifications for the conceptual framework are considered. The chapter concludes with a re-examination of the assumptions outlined in chapter 1, with consideration for the implications of researcher bias in interpreting the findings.

➤ Chapter 7: Conclusion

This chapter concludes the study by summarising the main findings and presenting recommendations for practice and further research. Revisions to the conceptual framework are explained and a practical tool in the form of a checklist is presented. This final chapter reflects on the doctoral experience, the methodology used and the personal learning achieved through this research study.

Chapter 2 The literature concerning academic skill development for online distance learning students

This research study seeks to identify academic skill development opportunities available to distance learning students at the Higher Education Institution (HEI) in which I am employed and to explore students' perception as to whether those opportunities make a positive contribution to their academic development. This chapter presents a critical review of contemporary literature during which the key concepts relating to Online Distance Learning (ODL) students' development of their academic skills are explored. These include: the specific needs of ODL students, tutor involvement in supporting these students, methods for 'scaffolding' student learning and HEI initiatives to support ODL students' academic skill development. Engagement with the literature will establish how the academic skill development opportunities available to students at this HEI integrate with the current body of knowledge. Publications about online distance learning frequently focus on an underlying theme of attrition or retention and consequently portray quality from a university or service perspective (Gilroy, et al., 2001; Sarsa and Soler, 2012; Jara and Mellar, 2007). Whilst this is important, the focus of this research study will consider the rich student experiences hidden behind the attrition and retention data.

To conduct this review a variety of information sources were utilised: including books and primary and secondary research articles. These sources were accessed using the university digital library and selected databases such as EBSCOhost, Swetswise, ERIC, Academic OneFile and Zetoc. A variety of journal databases were also targeted, namely: European Journal of Open, Distance and E-Learning; International Review of Research in Open and Distance Learning; Distance Education; Open Learning; International Journal of Educational Research; Quality in Education; and the Journal of Mixed Methods Research. The timeframe of the search criteria was limited to post 2000 to facilitate the review of contemporary research and practice in the field of academic skill development for ODL students. However, preliminary exploration of the literature revealed a need to widen the search to gain an understanding of the impact of the widening participation agenda on post 1992 universities. In addition to this, the search for literature relating to the specific requirement for ODL students to be autonomous, self-directed learners resulted in the need to access seminal texts prior to 2000. Since one aim of this research study is to explore whether academic skill development opportunities make a positive contribution to students' academic development, the notion of quality was considered to establish the determinants of quality from students' and other stakeholders' perspectives.

Throughout the review, gaps and omissions in the existing body of knowledge are identified and discussed. The chapter is concluded with a summary which illustrates how the literature has informed this research study and the potential importance of the research itself. The chapter closes with the study's conceptual framework which has been informed by the understanding gained from the current body of literature and which will continue to be developed as the research study progresses.

2.1 The context of 'study skill' support in universities

2.1.1 Widening participation and student preparedness for higher education

In the United Kingdom (UK), the widening participation agenda has led to a rapid increase in the numbers of students in higher education (Tribble and Wingate, 2013). Students emanate from hugely diverse educational and cultural backgrounds and frequently enter their HE course with various entry qualifications, widely different learning abilities and previous learning experiences (Wingate, 2006). In some cases students gain entry without any formal educational qualifications (Candy, 2000) via less traditional routes such as an admissions portfolio; a method of entry requiring students to demonstrate skills, attributes and abilities through their compilation of a piece of work in which they reflect upon their employment and personal experiences. Whilst the widening participation agenda has increased accessibility and made a HE qualification attainable to a wider population, it has brought with it some significant challenges for HEIs (Wingate, 2007). Jones and Thomas (2006) argue that many universities, but particularly the post-1992 universities, responded to what they refer to as the 'utilitarian' approach of the widening participation agenda; providing vocational courses for students with 'poor schooling' and from poorer socio-economic groups. They contest that little change was made to the structure and format of the traditional 3 year university courses in meeting the needs of these students, leading to 'bolt on' learning support mechanisms (Bennett, Dunne and Carré, 2000); a concept which will be discussed in section 2.4.

In addition to the impact of the widening participation agenda on universities, there are claims that schools do not adequately prepare students for studying at higher education as a result of "spoon-fed" secondary education (National Audit Office, 2002, p.15) which fails to facilitate students' development of self-learning skills. More recently, one of the aims of the 'Academies Programme' in the UK was to raise academic attainment and, whilst the programme did increase attainment in some areas, sixth form performance remained poor (National Audit Office, 2007). In 2014 the National Audit Office (NAO) reported that although standards in school education had

improved, a “significant number of children still attend under-performing schools” (NAO, 2014, p.7).

Internationalisation of Western higher education systems has also contributed to widely diverse social, ethnic and linguistic diversity in student groups (Tribble and Wingate, 2013). All of these contributory factors result in students being ill-prepared for the demands of academic writing (Lillis, 2001; Haggis and Pouget, 2002; Ganobcsik-Williams, 2006), thus HEIs have had to adopt systems for providing support to help address student retention and progression (Thomas, 2002). However, the requirement for students to develop academic literacy for different modules and courses (Lea and Street, 1998; Wingate, 2012) presents challenges not only for students, but also for academic and skill support staff. Wall (2006) suggests students’ deficit in writing skills is not confined to those attending the newer universities and the problem is beginning to extend to all universities. Wall (2006) claims that any lack in basic writing skills renders students unable to function at higher education, although once they have achieved these skills, students are thrilled at having gained skills they believed were beyond their capabilities. Whilst writing is clearly an essential skill for all students, the focus of this study is not purely on writing literacy, but on the diverse range of academic skills students are required to demonstrate and, thus, which universities have to be able to support.

2.1.2 Student experiences and expectations of higher education

In the United Kingdom, students’ views of their higher education experience are represented via the National Student Survey (NSS) which was first introduced in 2005 as a Higher Education Funding Council for England (HEFCE) initiative “to gather feedback on the quality of students’ courses in order to contribute to public accountability as well as to help inform the choices of future applicants to HE” (HEFCE, 2011). HEFCE’s aim for the NSS is to promote high quality in teaching and learning, to provide stakeholders with consistent information about the quality of HEIs and to enable HEIs to use the data for enhancing their services (Cheng and Marsh, 2010). Although league tables were not the primary aim of the NSS, the resulting overall student satisfaction score for each HEI was a natural by-product (Cheng and Marsh, 2010). The NSS undoubtedly provides HEIs and the public with some degree of measure representing students’ experiences at university, although to judge a university based on a score collated from the entire student body for that university as opposed to being course specific is less useful for prospective students. Course specific data are available through the NSS, but the lack of specificity of the questions makes it difficult to undertake any meaningful interpretation of the quantitative data.

This can generally only be fully explained by the course leader, although HEI quality enhancement initiatives are frequently taken at HEI senior management level in response to NSS results.

The seven headings under which the NSS results are summarised (overall satisfaction, teaching, assessment and feedback, academic support, organisation and management, learning resources and personal development) were originally developed for full time campus-based students. It could be argued these generic categories are equally applicable to ODL students, although options of 'neither agree or disagree' and 'not applicable' were introduced to the NSS in recognition that not all questions *are* appropriate for distance learning. Ashby, Richardson and Woodley (2011) raise concerns over the impact of students' decisions in selecting the option of 'neither agree or disagree' when they suggest 'not applicable' would be a more appropriate choice. It is important to acknowledge that campus-based students may face similar challenges, either in not understanding the questions or in selecting inappropriate responses; this perhaps highlights the challenges in defining scales which may be misinterpreted, as well as categories within such an influential survey which are not applicable to all participants.

At course level, individual student views on the quality of their educational experience via module evaluations or student representation are potentially a more useful quality indicator and easier to interpret. Module evaluations capture both quantitative data and qualitative comments which can be used by course and module leaders to enhance future deliveries. However the challenges still remain where module evaluations are generic for both campus and distance learning deliveries, which is the case at the university in which data will be collected for this research study. Jara and Mellar (2007) suggest this is further complicated where HEIs incorporate new modes of provision into campus-based courses but when identical mechanisms for evaluation are used. On occasions when module evaluation is contextualised to distance learning, Jara and Mellar (2010) highlight further problems relating to the processes for distributing and collating the evaluation tools and the responsibilities of personnel within those processes which can impact on the effectiveness of evaluating students' experiences.

Since students' experiences of their university course and their expectations are potentially very different, it would seem more appropriate to assess students' expectations *before* they start their course as opposed to evaluating their experiences after three years, during which their expectations and experiences will fluctuate. Baxter (2012) investigated ways in which students' expectations influenced their progression and found students appeared to have limited understanding and expectations of their distance learning course. In this study students contributed their views once they had

started their course, so it is important to acknowledge that students' realisations may have been based on hindsight, or simply that their experiences of university life may have influenced their initial expectations. Haggis and Pouget (2002) undertook a study of traditional age students which revealed that students' failure related to them having unrealistic perceptions of learning at university. In this study students were interviewed prior to commencing an access course and on completion of the first semester. Findings from this study indicated that students needed to be explicitly taught about the nature of university learning, as well as the importance of gaining confidence and self-esteem through student-teacher interactions *within* teaching situations. Although this study took place with 'traditional age' campus-based students, there are similarities in the academic backgrounds and personal circumstances of ODL students. For example the students in Haggis and Pouget's (2002) study lacked confidence in their learning capabilities due to previous negative schooling experiences. That said, students were reportedly determined and motivated to succeed, although they had no concept of the amount of time they would be required to allocate to studying. These emotions, personal challenges and feelings of self-doubt are features shared by non-traditional students (Smith, 2004; Dearnley, 2003; Burns and Sinfield, 2004).

Irrespective of whether students enter university directly from school, or as part-time mature students as many ODL students tend to be (Shillington, et al., 2012), students often base their expectations of higher education on their previous learning experiences (Dearnley, 2003). Consequently one might argue that students do not understand what is required of higher education simply because they have no previous experience of it. Gamache (2002) would appear to substantiate this view by suggesting students do not understand what learning at university involves, thus they encounter difficulties. Gamache (2002) argues that although learning is carried out in a social context, it is actually a personal and individual undertaking with personal and individual results; a concept which students need to understand in order to facilitate their learning. It could be contested that the self-directed learning required for ODL equates to personal and individual learning, thus the need to help them understand the requirements for learning are arguably greater than for campus-based students. Students embarking on an ODL course may well have preconceived ideas about learning at higher education, but the social context of learning in an ODL environment will be different to campus-based learning (Yorke, 2004).

The support required by ODL students during their course can be broadly categorised into personal/emotional support, academic or technical support and social support (Alias and Rahman, 2005; McPherson and Nunes, 2004). Dearnley (2003, p.5) utilised a phenomenological approach to investigate the tutor's role in supporting students,

suggesting tutors play a crucial role in supporting students with “life responsibilities” and “life events”. Dearnley (2003) also acknowledges that interaction between students’ different support networks is essential and that tutors need to show an awareness of these networks so they can be responsive to students’ needs.

2.2 Determinants of quality in the ODL student experience

Although there is much literature on the subject of quality in higher education, there appears to be a lack of explicit definitions. Bernhard (2011, p.44) suggests “quality is defined differently by each person or sector in a subjective, stakeholder-related manner”. Ehlers (2004) views quality as multi-dimensional with not only the different perspectives to consider, but also different meanings of quality (such as quality in the sense of usability or value for money) and levels of quality in all parts of the educational process. As a result of this complexity and in alignment with a constructivist approach, a variety of perspectives will be considered in an attempt to gain a greater understanding of what is meant by ‘quality’ to different stakeholders throughout the student journey.

Doherty (2008) argues it is possible to have appropriate quality systems which address the needs of diverse stakeholders and considers the holistic approach of the Quality Assurance Agency (QAA) Institutional Audit seeks to accomplish this. In the UK the QAA is responsible for safeguarding the quality and standards of education provided by universities and colleges, with the aim of ensuring students have a positive learning experience (QAA, 2015). Perhaps in recognition of its complexity, the QAA does not provide a single, succinct definition of quality. Instead, quality is explained via a comprehensive Quality Code which considers how well a Higher Education Institution (HEI) provides opportunities for students to achieve their award through their teaching, support, assessment and resources (QAA, 2015). These opportunities for learning are measured against Academic Standards. Interestingly, QAA standards and the Quality Code are developed with input from the higher education sector, which to some extent is unsurprising because they are the experts in the field, but their level of objectivity in what is arguably the provider focus of quality, could perhaps be questioned. The National Union of Students are, however, involved in consultation processes and thus, the student voice is reflected in the Quality Code. Nightingale and O’Neil (2012) claim the notion of HEIs meeting a standard is unproductive because it implies an acceptance of the level achieved, however comprehensive that might be. In their view, quality should engender improvement as opposed to simply assuring a level that can be expected by customers. Turner (2012) suggests standards lead to a focus on things that can be standardised (teaching hours, contact hours, time on a task) without

actually addressing the quality of the issue being considered. Whilst I share this view it is important that HEIs are accountable for the services they provide, and the requirement to meet standards provides stakeholders with some reassurance about the level of service they can expect (QAA, 2015). That said, many quality benchmarks are, as we shall see, predominantly a provider model for quality (quality assurance) as opposed to a customer-focussed model of quality improvement.

In addition to the statutory requirements for assessing quality of teaching, student feedback is widely used in higher education as a mechanism for quality enhancement via module evaluation, student representation (Jara and Mellar, 2009) and, of course, the National Student Survey (NSS). However if, as the literature suggests, students' expectations and experiences of HE are based on their previous learning, one might question the reliability in using students' views to monitor quality. Smith (2004, p.30) interrogates the literature in which students' legitimacy in this respect is examined, concluding that as customers "students are uniquely placed to describe and evaluate their experiences of HE". I share this view, not least because their collective 'voice' in the annual NSS is hugely influential.

The differences in ODL and campus-based teaching practices are not, however, recognised in the methods used to measure quality. Inglis (2005) suggests these differences need to be taken into account when the processes for judging quality are designed. Moreover, he claims the commonality which exists between ODL and campus-based education also needs to be recognised in the criteria used to judge quality. A variety of benchmark statements and quality frameworks exist in the UK and internationally. Sarsa and Soler (2012) compared a number of UK and United States of American e-learning benchmark statements and quality frameworks, all of which identify broadly similar themes for assuring quality in students' e-learning experience, but which vary in length and complexity. Sarsa and Soler (2012) presented a series of conceptual maps to identify the interrelations between the various quality frameworks which, they claim, are provider-oriented as opposed to user-oriented. Sarsa and Soler (2012) attempted to counter the provider-oriented themes by undertaking research with their own students in which they asked them to rank their perceptions of quality with regard to key themes drawn from the conceptual maps (quality of e-content, quality of teaching processes, good learning outcomes and institutional Information and Communication Technology policy). This small quantitative study (n=145) revealed differences between students' and HEI management/teachers' perceptions of what constitutes a quality learning experience. In my view this is an important aspect of the quality debate, because if educators' and students' perceptions of quality are different, HEI responses to the provider-driven mechanisms designed to assure quality of the

student experience (QAA standards, the NSS, HEI module evaluation surveys) will always be reactive as opposed to engendering a more proactive and student-focused ethos of quality improvement. According to Sarsa and Soler (2012), students perceive the key factors affecting the quality of their learning experience centre on processes for supporting their learning (primarily tutor guidance and motivation and student-teacher communication tools) and an effective learning environment. Sarsa and Soler (2012) purposely chose to exclude the ability for students to clarify their responses using qualitative comments. Instead they provided students with a full explanation for each of five questions before asking students to choose what they perceived as the most important response for them. In my view this raises questions about the reliability of their methods and whether their explanations influenced students' responses. Nonetheless, other qualitative studies (Duranton and Mason, 2012; Shillington, et al., 2012) reinforce the importance of support processes in facilitating a positive student experience in distance learning.

The first point of contact for most students requiring support is an academic tutor; thus it would appear that the role and actions of tutors are crucial in facilitating a positive student experience. Hill, Lomas and Macgregor (2003) used a grounded theory approach to explore the experiences of campus-based students, claiming there was little research in this field at the time of their research, hence their adoption of an inductive methodology. Four themes emerged from their focus groups as key factors which students considered to be important for high quality education: quality of the lecturer, information technology (IT) and library resources, social and emotional support systems and, student engagement with learning. Hill, Lomas and Macgregor (2003) found the quality of students' experience was significantly influenced by tutors who were not only knowledgeable, but were enthusiastic, caring and helpful. Institutional support networks were also a priority in terms of access and availability. This compares favourably with the findings of Tsinidou, Gerogiannis and Fitsilis (2010) who undertook a case study to explore the determinants of quality in campus-based education from students' perspectives using the analytical hierarchical process. They considered a wide range of factors relating to academic staff, administrative services, library services, curriculum structure, location, infrastructure and career prospects. They too found that students gave priority to interactions with tutors, with particular emphasis on tutors' communication skills, approachability and friendliness.

If tutor personality and communication skills are a significant quality determinant of campus-based students' experiences, this surely becomes a greater challenge for distance learning tutors in the absence of visual cues. In their multi-method study, Price, Richardson, and Jelfs (2007) found this to be an issue which, they claim,

impacted on students' results in summative assessment. Using two quantitative surveys, comparison was made between students who undertook face to face and online tutorials. Their study concluded with interviews facilitated via email to elicit rich qualitative data which substantiated their views that a lack of paralinguistic cues in online tutorials were influential in students' success. Although their methods appear rigorous, attributing lower marks to the students who undertook online tutorials on the basis of the lack of visual cues warrants, in my view, further exploration, such as comparing students' marks in other modules. However, Salmon (2006) suggests competent online communication skills such as self-awareness and interpersonal sensitivity are key skills for those supporting ODL students and are a necessity for tutors and, interestingly, Price, Richardson, and Jelfs (2007) advise training opportunities to promote understanding of how students make sense of communication in the absence of non-verbal, paralinguistic cues.

Tutors' personal attributes and skills in facilitating student learning are clearly influential in contributing to a positive student experience. Ehlers (2004) considers quality in e-learning from the learner's perspective and argues quality should be directed towards the needs of individual students, thus empowering and enabling their learning. This suggests a very customer-focused and personalised approach to learning, which may be achievable with small cohorts but is arguably more difficult to achieve with courses recruiting large groups of students. In the current economic climate in which HEIs' and students' finances are being continually squeezed, efficiency and value for money are important and it is difficult to comprehend how tailoring learning on an individual basis represents cost effectiveness for the institution. From personal experience I would argue that whilst one to one support is financially inefficient, communication can be provided which nevertheless makes students *feel* they are receiving an individualised experience. This can be achieved through personalised communication such as individual emails to students as opposed to 'all student' distribution lists. Formative feedback on draft work also provides opportunity for increasing dialogue between tutors and students (Jacobs, Winnard and Elliott, 2012), thereby enhancing one to one interaction; a concept which will be discussed later within this research study. Ehlers' (2004) research was a large empirical study investigating the preferences of students with "considerable experiences in e-learning". It is unclear whether their experience was gained from previous distance learning deliveries, or whether their views were sought at the end of their current course. It is difficult to critique the reliability and validity of the study from the data provided, although some of the key themes (tutor support, collaboration, technology and support systems) show similarities with those identified by Hill, Lomas and McGregor (2003).

In addition to any personal attributes and skills, there are features about tutors' work ethic which also determine students' perceptions about the quality of support they receive. According to Smith (2004), these include: tutor availability and accessibility; tutor timeliness in response to queries or feedback on work; tutor ability to provide appropriate and constructive feedback; and tutor ability to form and maintain an appropriate relationship with the student at a distance. Regardless of the type of support required by students, Smith (2004) proposes that the manner in which each of these support mechanisms are delivered can be an 'enabler' or 'barrier' to the quality of the support perceived by the student. The participants in Smith's study were mature postgraduate students in full or part time employment, thus there are similarities with some of the participants in this mixed methods study. Smith (2004) concludes that her participants were academically capable due to their level of study. I agree there may be students in all cohorts who have stronger academic skills, but in my experience this tends to be the exception rather than the norm, even at postgraduate level. Even so, mechanisms for student support should not merely focus on student weakness, but should provide opportunities for academically strong students to enhance their skills. Nonetheless, evidence suggests students require readily accessible and individualised support from well-trained tutors (Smith, 2004; Ehlers, 2004; McPherson and Nunes, 2004).

Technology and the accessibility of online course content is a further determinant for students in the quality of e-learning. Udo, Bagchi and Kirs (2011) concluded from their quantitative study that website content has the most positive influence on how students perceive the quality of their e-learning experience. I concur that aspects of website design and content are important in helping promote a positive student experience, but Udo, Bagchi and Kirs (2011) sought students' views on whether audio, video, animations and multimedia were used properly in the website. Udo, Bagchi and Kirs (2011) have not identified the participants' field of study and in my view response to these questions requires a level of expert knowledge of web design and consequently students' responses may have been influenced by the level of their personal skills. Although design of the online learning environment is clearly important, McPherson and Nunes (2004) claim that tutors with pedagogical information and communication skills are equally as important as the design team, suggesting that if tutors do not already possess these skills, they should at least be willing to acquire them and not be solely reliant on subject knowledge.

A fundamental aspect of the quality debate is the learning which takes place. Ehlers (2004) describes the learning process as something which is not merely delivered to the student, but rather it is a co-production between the learner and the learning

environment. This, Ehlers (2004) argues, distinguishes learning from a business or service model where a product or service is *provided* to a customer and, instead, the learner is an integral part of the learning process which they have to carry out by themselves and as such it is their responsibility. In his large, two phase study (n=56 and n=2000) with experienced ODL students, Ehlers (2004) identifies 30 dimensions of quality in e-learning which were structured into 7 key themes: tutor support, collaboration, technology, costs, information transparency, course structure and didactics. Of these, tutor support was 'important' or 'very important' for a large proportion of students, but with considerable variance in how students' perceived this support should be provided. Although these themes are framed by the technology of the time, this study is interesting in so much as it confirms the significance placed on the role of the tutor by students studying in an e-learning environment. The presentation of the data and results lack clarity on occasions; including use of a pie chart to illustrate the 7 key themes as equal 'portions'. Whilst the pie chart demonstrates the key themes as a model of quality, the importance of each theme, based on the data, is not indicated.

2.3 Skills required by ODL students

All students require a variety of skills to promote their success in higher education, irrespective of the mode of learning. Wingate (2007, p.394) refers to the need for "learning to learn" at university and explains this as firstly becoming an independent learner through understanding the process of learning, and secondly, becoming competent in their discipline through understanding the knowledge related to the discipline. However, Wingate (2006) claims students are not prepared for independent learning and, in my experience as a distance learning tutor, independent learning may be more challenging for remote ODL students who have to acclimatise to an online learning environment and asynchronous learning and support. In fact, Ludwig-Hardman and Dunlap (2003) suggest ODL students' feelings of isolation are greater if they are ill-equipped to deal with the demands of remote learning.

McPherson and Nunes (2004) identify a variety of skills which students new to online learning require and which, in their view, students need to be trained in, specifically: low-level computer skills, online social skills, online etiquette, web navigation and web searching. This viewpoint is 13 years old, but remains current. These continue to be crucial skills which ODL students need to master. Students may well be competent in using social media, web navigation and web searching for personal use, but I would argue the skills required to support ODL in higher education are more specialised. For example, online etiquette for social media and academic discussion in a VLE are quite

different, and searching and identifying reliable and robust resources are skills which need to be taught, even when students are confident in using technology and electronic information (Arndell, et al., 2013). Tury, Robinson and Bawden (2015) share this view and refer to specialist skills required by ODL students to help them navigate unfamiliar online learning environments, but specifically searching for library resources. Ludwig-Hardman and Dunlap (2003) cite a variety of additional skills required by ODL students: self-direction, self-discipline, the ability to work alone, time management, learning independence and, the ability to develop a plan for completing work, all of which need to be explicitly taught and supported. However, where the online learning environment is not highly teacher-centred, Hung, et al. (2010) maintain students are required to take a more active role in their learning, such as taking responsibility for their learning, time management and completing work on time. Pintz and Posey (2013) suggest that in addition to the academic challenges facing ODL students, they are required to be self-regulated, independent learners. Dearnley (2003) also suggests ODL students need good time management and technological skills, as well as their need for becoming acquainted with the expectations for academic attainment. It would therefore appear that in addition to the sound academic skills required by campus-based students, ODL students need a particular set of skills to facilitate their success at higher education.

2.3.1 Self-directed learning and autonomy

A specific requirement for student success in ODL is in becoming an autonomous, self-directed learner (Ludwig-Hardman and Dunlap, 2003). Alias and Rahman (2005, p.1) share this view, but reinforce the importance of tutors understanding learners' needs so as to facilitate their transition from "dependency to achieving self-direction and personal control over their learning". Self-directed learning was first defined by Knowles (1975, p.18) as:

"a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes".

This definition appears straightforward except for the phrase 'with or without the help of others' which, in my view, introduces an element of complexity because it relies upon the ability of students and tutors to recognise when help may be required. If, as the literature suggests, tutors need to facilitate students in becoming self-directed learners, I would question how tutors recognise this in students, either those who present as self-directed learners, or those in transition from dependency to self-direction. Students' lack of contact with tutors or lack of engagement in the online environment does not necessarily equate as independence or self-direction, although inexperienced

tutors might perceive it that way. In practice a lack of student contact usually means quite the opposite and, as Simpson (2008) suggests, it is frequently the weaker students who are reticent in seeking help. However, Biggs (2003) argues that activities to promote self-directed learning should include generic study skills, study skills which relate to content and meta-cognitive study skills to promote self-management and facilitate students' learning in new contexts. This holistic approach to learning appears to align with the learners' needs-expectation continuum referred to by Alias and Rahman (2005) and this research study will explore whether students' perception of the academic skill support available to them in their studies thus far follows a format for promoting students' skills in self-direction. However, Knowles (1975) questions whether learner attitude underpins the differences between tutor-led and student-directed learning, whereby self-directed learners recognise when they need to be taught and will exploit those situations without losing their self-directedness.

Autonomy is more difficult to define explicitly, especially since there is a tendency for terminology to be used interchangeably with self-direction. For example, autonomy can be explained as: independent and life-long learning; students taking responsibility for planning, initiating and evaluating their own learning; students' ability to learn in a logical manner; students' capacity for taking control of their learning (Scott, et al., 2015). Boud (1988) describes autonomy both as an aspirational goal (either a student goal or aspirations of tutors that students become autonomous) and also an approach to educational practice where course design emphasises student independence and responsibility for decision-making. However, Boud (1988) claims that autonomy is integral to any aspect of learning such that learners have to make decisions about what and how to learn. On the face of it, autonomy appears to be similar in definition to self-direction, with the exception that autonomy focuses on independence and freedom from a tutor, whereas in self-directed learning a student recognises when there is need to seek help as opposed to being fully independent.

From personal experience, course design can facilitate students' development in becoming self-directed, autonomous learners. However, this requires course leaders to adopt a holistic overview of all modules to ensure synergy between modules; which can be more challenging when students have choice in module selection. Many students do become more autonomous as their studies progress, whilst others demonstrate dependency on tutors even at the point of completion. For those students who enter university with accreditation of prior learning, there is also an expectation that they will be adequately prepared for learning at their level of entry. Some students do appear to be able to make this transition, whilst for others this is much more challenging, particularly since they have missed earlier foundation stages of academic

skill development. In my view, these issues beg the question whether all learners have the ability to become self-directed, autonomous learners (assuming course design and teaching does facilitate this), or whether autonomy is dependent upon other individual factors or behaviours. For example, Higgs (1988) suggests students' attitude in project-style activities where they are required to work independently is influenced by their behaviour and motivation for learning.

2.3.2 Motivation

Motivation is a key factor in student retention, with students who are well motivated being better able to overcome barriers such as time management or difficulties with personal circumstances (Dearnley, 2003; Simpson, 2008). Chen and Jang (2010) also claim that motivation has implications for retention, achievement and course satisfaction. However, Biggs (2003, p.13) describes motivation as a "product of good teaching, not its prerequisite". Thus, maintaining students' motivation seems to be influenced not only by their personal behaviour and circumstances, but by tutors too. Simpson (2012) is very much an advocate for tutors motivating ODL students. In his opinion ODL students do not require a specific set of learning skills, although he accepts learning skills may be a factor in students' success. He believes student motivation to learn is a more important attribute, together with reasonable self confidence in their study methods. That said, Simpson (2012, p.62) does acknowledge that some students, particularly those from disadvantaged educational backgrounds, require support from tutors for what he calls "study survival skills". For students who need this type of academic support he suggests simple study advice at the start of the course, but to avoid making studying appear complex and challenging. After this preliminary study advice, he advocates tutors proactively contact students via email to maintain their motivation.

If a tutor's role in motivating students is so influential, it is important that the factors which affect students' motivation are understood. Baxter (2012) undertook an interesting study in which the motivational factors of groups of students at different stages of their learning journey were explored. Broad motivational factors included: an intrinsic determination to succeed; the ability to create a supportive home environment; and interventions from support staff or tutors. More specifically, however, students became more confident having passed a module and felt a sense of pride in their ability to study at degree level. Baxter (2012) also claims a variety of university initiatives influenced students' motivation to succeed, namely: value for money, support provided by tutors when students experienced difficult personal circumstances, tutor support at transition points to a higher academic level in the course when student confidence

became lower. What is particularly interesting in this case study is the broad student sample which was categorised by age (18-25 and 25+), as well as different stages of the student journey; students completing both credit and non-credit bearing qualifications and students from two widening participation initiatives. Although acknowledged as a small scale study, Baxter (2012) concludes that tutor input at key points in the student journey, namely induction and students' transition from levels four to five, has a substantial influence on student progression.

Facilitation of students' motivation begins at the induction stage. Wozniak, Pizzica and Mahony (2012) evaluated their tri-modular online induction which begins before the start of the course. Their intention had been to hold student focus groups, but student response was insufficient. Instead, students completed a brief evaluation at the end of each module and moderators, responsible for moderating discussion activities and providing students with feedback and encouragement, maintained reflective diaries. Their findings suggest the online environment needs to motivate students in order to encourage engagement. Although they do not explicitly advise how this should be achieved, the implication seems to be that moderator involvement motivates students to engage in the online environment, since in the second module (which was purposely not moderated) engagement fell to 50%. The use of learner-centred activities at this stage of a students' learning journey is a positive attempt in initiating the concept of self-directed learning. Unfortunately there is lack of explanation of the content of these 'self-motivating' activities, which would have been helpful for academics new to teaching online, as well as providing a potentially more robust endorsement to support their research. Student engagement in this induction does appear to follow the five-step model advocated by Salmon (2004, p.170), who suggests that tutors must recognise student motivation at stage one (access and motivation) is an "act of faith for most participants". Salmon (2004) advocates a variety of tutor strategies for motivating students in the initial stages of their learning journey, including: emphasising the importance of communication and networking; specifying etiquette for online interactions; making the environment user friendly and fun; and ensuring that students' fear and anxiety is allayed via online discussions.

Although it is acknowledged that ODL students are motivated to learn (Smith, 2004; Dearnley, 2003), tutors appear to have a crucial role in maintaining students' motivation. Dearnley (2003) suggests tutors' skills in providing emotional support to help students cope with 'life responsibilities' and 'life events' are vital in contributing to students' motivation and retention. Simpson (2012) agrees, claiming that loss of motivation tends to be the factor leading to student withdrawal, whereas if their motivation can be maintained, students can succeed even under the most challenging

personal difficulties. Simpson (2008) advocates a proactive approach whereby tutors initiate contact with students rather than relying on them to self-refer. He argues this approach enables tutors to direct students to support mechanisms at appropriate times, rather than adopting a corrective approach which can leave students feeling demoralised. Wall (2006) shares this view, commenting that students who are referred for study skills support outside the curriculum, such as writing classes, can be seen by students as a public admission of failure. Whilst ODL students will not necessarily attend these type of classes in person, in my view even the concept of being directed to virtual or online support services may be construed negatively by students, even when the tutor's intention was good-willed.

To conclude this section, Chen and Jang (2010) warn against splitting student groups into 'motivated' and 'unmotivated' students, claiming that students may be equally motivated but have different reasons for participating in specific online activities. This would seem to make it even more challenging for tutors to distinguish not only which students are motivated to learn, but those for whom different tasks may or may not be a further motivator.

2.4 Good practice approaches to facilitate students' academic skill development

The processes for supporting students' learning must not only facilitate a positive experience, but also need to meet the individual needs of students (Simpson, 2008; Ehlers, 2004; Shillington, et al., 2012). Ludwig-Hardman and Dunlap (2003) argue that one to one access to advisers is a critical learner support mechanism. Simpson (2008) suggests, however, that HEIs tend to develop support tools without matching them to the diverse needs of ODL students, alleging that students have tools thrown at them and are expected to select and use them. This implies students need to be explicitly directed to appropriate resources at specific points in time and there is linkage between academic skill development opportunities and individual students' need of those opportunities. Duranton and Mason (2012) and Alias and Rahman (2005) comment that support tools should be embedded in the ODL delivery as opposed to being a separate aspect of study. In their case study in which they investigate the use of technology for supporting ODL students, Duranton and Mason (2012) acknowledge the significant role technology can play, but suggest the quality of the student experience can be enhanced considerably when students are familiar with the technologies or when they can be applied in a professional context. Although their case study focuses on postgraduate language translation students, in my experience I fully concur that students struggle to engage with a specific technology if they cannot see its value

either in a course or professional context. It is often the more familiar technologies, such as email, telephone and Skype which result in the highest levels of engagement and which promote individualised support.

Although there is considerable evidence in the literature for skill support to be embedded within course design (Duranton and Mason, 2012; Alias and Rahman, 2005; Arndell, et al., 2006; Wingate, 2006; Wingate and Andon, 2011), Clughen and Connell (2011) discuss the issue of ownership for the delivery of academic skill support, primarily whether this should be provided by course tutors or learner support staff. Preliminary findings of their research indicated that academic staff were critical of the notion to embed writing skills into an already content saturated curriculum, considering instead that students should be directed to extra-curricular writing support centres. However, Clughen and Connell's (2011) reflections on the project to introduce the embedding of writing skills across curricula suggested tutor resistance to be a result of a much deeper attitudinal issue where academic staff considered it 'beneath them' to provide writing support to their students. This is an interesting perspective and something in my own experience I have overheard, with phrases such as 'we should not be providing feedback on their (students') writing because we are not their English teachers'. Whilst the reflections of Clughen and Connell (2011) offer an honest and interesting insight into the introduction of writing skill development across curricula, one might argue that the resistance encountered may have been, in part, due to poor approaches to change management whereby academic staff did not fully comprehend the benefits of the strategy before it was enforced. That said, they claim value in understanding the resistance they faced because this, they suggest, enabled academic staff to own the literacy development for themselves.

From a course and student perspective I view the embedding of study skills across a course as essential in providing students with academic skills, not only at the point at which students need them, but contextualised to module content. However, embedding skills at the point of need may be less effective for those students who enter with accreditation of prior learning, and possibly more so for those entering with experiential as opposed to certificated learning. It may also be a factor affecting postgraduate students with diverse learning experiences from the UK and internationally. In these circumstances there will, in my experience, be a need for tutors to fill this 'gap' in students' knowledge and understanding of academic skills, thus facilitating their success, whatever their level of entry, in becoming self-directed learners. This 'gap' tends to be filled by 'bolt on' (Bennett, Dunne and Carré, 2000) and remedial support which Wingate (2006) claims is of limited use in comparison to more inclusive models which reach all students.

Dearnley (2003) suggests self-directed learning is challenging for many students who have previously been used to being “told” information by a person in “authority”, leading to low levels of self-confidence in their ability to take responsibility for their own learning. Ludwig-Hardman and Dunlap (2003) comment that students need to be explicitly taught and supported in helping them achieve the skills to become a self-directed learner. They suggest this is achieved by providing scaffolding in the form of structured support during the early stages of their learning and gradually relinquishing responsibility to students as they become more confident learners. Shillington, et al. (2012) also advocate a package of support staged at intervals that promotes academic confidence and capability, but additionally they argue tutors need to proactively link students with the services they might require. Ludwig-Hardman and Dunlap (2003) suggest learner support strategies should begin at the recruitment and admission stage. They advocate a variety of strategies at this point: self-assessment tools to help learners evaluate their level of preparedness for study, diagnostic pre-assessment tools to identify learners’ strengths and areas for improvement and a learning orientation questionnaire to determine students’ readiness specifically for online learning. There may well be value in identifying skills prior to learning, although Dearnley (2003) argues students will initially base their needs on their previous educational experience, consequently these self-assessment and diagnostic tools may not truly represent students’ needs for distance learning because they have no understanding of what to expect from this style of learning. Pintz and Posey (2013) explain their use of a pre and post self-assessment diagnostic questionnaire which students complete before and after an online learning programme to support new undergraduate nursing students. These questionnaires focus on students’ motivation for learning, as well as their learning strategies. Although Pintz and Posey (2013) provide no detail about these diagnostic tests, I can see potential value in the post diagnostic tool in enabling comparison with the pre diagnostic test and evaluating whether learning occurred. However, they provide no evaluation of these diagnostic tools, so it is impossible to decipher their usefulness for students or the education provider.

Building a relationship with tutors and the university community is considered to be an important stage of pre-course preparation. Self-direction is learned in a social context (Dunlap and Grabinger, 2003), so initiating relationships is a key step in students’ ODL development. Orientation to online learning provides opportunities for strengthening social interactions between tutors and students, as well as between students. Shillington, et al. (2012), Ludwig-Hardman and Dunlap (2003), Motteram and Forrester (2005) and Winnard and Elliott (2012) all advocate the use of induction as a robust means of laying the foundations for the online community. Aside from the practical

aspects of learning how to navigate the online learning environment, interpretation of student surveys and summative reflective logs led Duranton and Mason (2012) to conclude that proactive support from tutors promotes peer interaction and helps develop the online community. Peer interaction can be extended by developing online group discussions, although Duranton and Mason (2012) suggest peer groups should be small since this promotes confidence and willingness of students to collaborate, share their work or undertake peer review activities.

Collaborative learning not only helps reduce feelings of isolation which can exist with ODL (Duranton and Mason, 2012), but it is pivotal in the social processes of learning. Ludwig-Hardman and Dunlap (2003) claim that scaffolding is also an inherently social process, thereby necessitating learner support mechanisms to utilise collaborative approaches. In addition to learner support strategies at recruitment, admission and induction as previously mentioned, they also advocate one to one access to 'educational provider staff' as a critical support mechanism. In my view this is a misleading term, implying that academic tutors provide this crucial element of support. However, their work explicitly refers to learner support staff taking responsibility for mentoring and helping students create 'academic action plans'. This mentorship appears to be tailored to individual students' needs, with learner support staff changing their mode of support as students take more responsibility for their learning. The gradual relinquishing of support takes the form of offering acknowledgement, positive feedback and encouragement, instead of the higher levels of structure required at the start of a student's learning journey. However, Wingate (2006) claims that learning how to study effectively at university cannot be separated from subject content and the process of learning. This would seem to imply that subject tutors are better placed to support students in their learning rather than generic learner support staff who do not have subject specific knowledge.

The argument for subject specific tutors to provide embedded study skills support is a particular focus for Wingate (2006; 2007; 2012) and Tribble and Wingate (2013). In all of her work Wingate explains the need for subject tutors to deliver study skills support due to the fact knowledge is discipline-specific and as such it is constructed differently in different disciplines; suggesting "a mutual understanding between tutors and students of what 'knowledge' means in their discipline and what 'learning' implies has to be established at the outset of the university course" (Wingate, 2007, p. 395). She acknowledges tutor reluctance in engaging in study skill support for students, but promotes the idea of initiatives to raise tutors' awareness of the types of support required, as well as providing them with appropriate support mechanisms that are not overly resource intense on tutor workload. She discusses the limitations of the 'bolt on'

approach, often in the format of course handbooks which address issues such as time management, essay writing, note taking and revising, but which, although they might be contextualised by course tutors, are still not embedded in subject specific content. Wingate (2006) suggests support via this type of instructional text-based format contradicts experiential learning theory, as well as adding to students' burden in the amount of reading required for their studies. In my experience this is very much the format by which students are provided with preliminary study skills support and advice, with students being issued or directed to vast quantities of information, particularly at the start of their course. This can lead, in my view, to students feeling overloaded and forgetting at a later point in time that they have already received the information. Again, in my experience, I have overheard tutors commenting that students request advice or information when they have already received it. This should alert tutors to the fact that information is perhaps not timely, but tutors' assumption seems to be that students' should remember information rather than tutors proactively prompting students and providing information in a timely manner.

An alternative pre-course support tool is the provision of modular learning. Lorenzi, MacKeogh and Fox (2004) describe their use of a module originally designed for campus-based students but which has been adapted to support distance learning students. The underpinning pedagogical principles for the module are sound in so much as the module aims to help students acquire or update their skills for university, provide an insight into the online environment and promote opportunities for interaction between tutors and fellow students. Lorenzi, MacKeogh and Fox (2004) do not, however, identify the duration of the module other than it being 'short'. There is no reference to whether the module is credit bearing or the cost implication, although students are expected to complete the module before commencing their course. It is difficult to make a judgement as to the feasibility of this method of pre-course support in light of the limited details available, although the rationale for its use in providing a taster for students would appear to be pragmatic from both the HEI's and students' perspective. Whilst this research by Lorenzi, MacKeogh and Fox (2004) might be somewhat dated, familiarity with this type of modular approach to study skills development within the HEI at which I am employed means it is relevant within my work context and thus, potentially with the participants in this research study. More recently, Pintz and Posey (2013) reported on their experiences with a five module online learning programme aimed at preparing students for an undergraduate nursing course. Interestingly, although students enjoyed this learning experience, students commented they would not apply the information they had learned to their course. On the face of it this seems an astonishing revelation, but Pintz and Posey (2013) explain this may indicate students are unable to predict how pre course learning will be

relevant to their course work. This is an interesting point and one which leads me to question the helpfulness (for students and education providers) of diagnostic self-assessment tools if students are unable to make any linkage between the assessment and their future learning.

Simpson (2012) is sceptical about the use of diagnostic self-assessment tools and considers they can have negative associations for some students with recollection of exams and past failures. In his view, the completion rate of diagnostic self-assessment tools is low and he suggests the students who complete these tests are those who are competent in the skills assessed by the test. In my opinion the concepts of diagnostic skill self-assessment and pre-course academic skill development are interesting, but I would question the usefulness of diagnostic tests held only at the start of a course and suggest some sort of diagnostic assessment may also be of value at transition points between different levels of learning. More importantly, I would also argue students need some level of personal support for diagnostic tests to be useful, thus highlighting the importance of tutors and skill support staff and not merely the technology.

2.5 HEI approaches to 'study skill' support

Review of the literature thus far has indicated a need for HEIs to provide students with academic skill support. Ideally learner support should meet individual students' needs, and be embedded within course design and contextualised to module content as opposed to being a 'bolt on' service. However, Wingate (2006) suggests most universities provide remedial support which is offered in extra-curricular skill centres facilitated by support staff, a situation which reflects the practice within the HEI at which I am employed. She claims that whilst this method of academic skill support is convenient and cost effective for HEIs, not least because a limited number of learning experts cater for students across a range of disciplines, it has considerable limitations in terms of meeting students' needs, primarily because it is not contextualised to their learning. Specifically in the field of support for academic writing, Wingate, Andon and Cogo (2012) claim that writing support is provided in central support units which aim to meet the needs of students across all disciplines. Tribble and Wingate (2013) suggest writing support falls broadly into two categories: support for non-native English speakers and remedial study skills courses for other students. On the other hand, Bell (2011) contends there are three models of support for academic writing: the 'skills model' which she says most universities provide and which play a vital role in supporting students, a 'socialisation model' and an 'academic literacies model'. However, Wingate, Andon and Cogo (2012) argue a lack of good practice examples, as well as tutor reluctance, are two key reasons

inhibiting the embedding of writing instruction (the academic literacies approach) across curricula.

Gamache (2002, p.278) argues that decontextualized learning in the form of study skill remediation which is 'external' to the student and their 'internal' lack of understanding of what learning involves, both contribute to student failure. This would seem to suggest that although HEIs perceive generic skill support centres to be resource effective, the opposite may in fact be the case if the support is not meaningful and useful to students. More to the point, academic skill support centres tend to be campus-based and therefore not available to ODL students who are remote from the university. Even if learning support centres are intended to complement teaching as Haggis and Pouget (2002) suggest, in my experience these centres have severe limitations for ODL students who are unable to benefit from face to face interactions and dialogue. Furthermore, in the context of providing information to aid ODL students in the use of online libraries, Tury, Robinson and Bawden (2015) suggest support is often an adjunct to the services provided to campus-based students, something which resonates with my own experience.

Maintaining proactive and effective dialogue with students is viewed as a key strategy for motivating students (Simpson, 2008). Where academic skill support is required, this should be contextualised to meet individual students' needs, although Ehlers (2004), Simpson (2008) and Shillington, et al. (2012) claim that HEIs tend to develop tools without matching them to diverse students' needs. Furthermore, Shillington, et al. (2012) suggest most support for ODL is subsumed within the resources of campus-based deliveries or as supplementary learning materials. Pintz and Posey (2013) argue that the typical adult and non-traditional nature of ODL students means many are experts within their own working environment, but are unused to applying skills such as research and writing skills within a work context. In addition to this, they typically have had little exposure to learning technologies and, as a consequence, adult ODL learners tend to struggle during their first term (Pintz and Posey, 2013). However, they claim that whilst academic support is available to ODL students, it is generally aimed at traditional campus-based students who are able to attend person-centred tuition sessions.

Technology provides options and tools for facilitating students' development of their academic writing skills. Goodfellow, Strauss and Puxley (2012) comment that the drive for cost-effectiveness is leading tutors to access and use generic reusable web-based materials to support students' development of their writing skills, but argue that generic materials need to be contextualised to the field and level of study or assessment style. Furthermore, they highlight the challenges faced by ODL tutors, who are not writing experts, in providing students with that type of support, and the problems associated with

them doing so. To facilitate this they piloted a tool which acts as an interface to help tutors identify specific writing anomalies within student assessments and to contextualise feedback to those needs. In my view this tool has the potential to be a useful aid to tutors, although there is still a requirement for tutors to categorise the type of written problem. More importantly, however, the tool focusses on feedback after assessment so my perception is that this remains a form of remedial action whereby students are directed to a resource, albeit contextualised to their needs. In their study, Goodfellow, Strauss and Puxley (2012) admit they have made no attempt to evaluate whether web-based materials are considered effective by students, choosing instead to focus on helping tutors provide more contextualised support to individual students' needs. This is in contrast to my research study where students' perceptions about the effectiveness of the various academic skill development opportunities available to them will be sought.

A further issue in the use of web-based learning objects is the design and navigational aspects. Watson (2010) claims that considerable effort has been placed to enhance the overall appearance and technological impact of Re-useable Learning Objects (RLO), whilst content frequently lacks pedagogical underpinning in the form of scaffolding to structure and guide students' learning. She suggests this is a result of learning objects being designed by technologists with little or no input from academic tutors. Watson (2010) provides a useful explanation of different types of learning object, which include: simple digital resources such as videos which have pedagogic potential; or combinations of digital resources which have pedagogic intent, such as audio-visual resources with or without narrative and multiple choice self-check assessment tools. However, Watson (2010) promotes the use of activity-driven learning objects in which pedagogic tasks form the basis of the learning. From my perspective the interesting aspect of her study is that she sought students' perspectives of the usefulness of the learning objects, in addition to tutors' views. In her case study she used multiple methods to gain views from three cohorts (2004, 2005 and 2008): student questionnaires (n=800), observation of students using the learning objects (n=70), tutor questionnaires (n=150) and student reflective logs (n=120). Overall students in each cohort showed high levels of satisfaction with the learning objects and the contribution to their learning. Although the learning objects evaluated by Watson (2010) were used to supplement campus-based teaching, these underpinning principles of learning object design can be applied to support for ODL students who never attend campus.

A combination of well-trained tutors, motivated students and technology means the opportunities for successful ODL provision is feasible. However, Lentell (2012, p.24) posits that "contact universities have largely not recognised that distance learning is a totally different pedagogy, and have not come to grips with the underpinning

organisational requirements needed to implement and sustain quality distance learning.” She suggests that in the absence of a top-level strategy and organisational support for distance learning, HEIs who are working hard to increase their off-campus provision will fail to do so to any significant level – in fact she refers to most dual university provision as a ‘cottage industry’. Although Lentell (2012) highlights key differences between campus-based and ODL delivery, when it comes to policy development she advises against marginalising distance learning via the development of separate policies. Instead she advocates contextualising policies with sub-processes for distance learning which, she suggests, ensures parity of learning outcomes, experience and qualifications. Her comments about ‘cottage industry’ distance learning, although making me feel somewhat defensive, do resonate with my own experiences as an ODL tutor, comments relating to a bottom-up approach for ODL course development and innovation, and the need to bend to university policies for campus-based provision to make them fit ODL students’ circumstances. That said, there is, in my view, an appetite for improvement within the university in which I am employed, albeit driven by the NSS which is, as the literature suggests, not wholly relevant to many ODL students and courses, and it is anticipated this research study will contribute to improving the experiences of ODL students seeking to enhance their academic skills.

2.6 Chapter summary and conceptual framework

In this chapter, critical review of contemporary literature provided opportunity to analyse the key concepts surrounding ODL students’ development of their academic skills. These concepts related to the research questions, thereby providing a deeper understanding to inform the methodological design, methods of data collection and to facilitate data analysis.

The widening participation agenda has led to a rapid increase in the number of students accessing higher education (Tribble and Wingate, 2013). This, together with internationalisation of Western higher education systems and students’ lack of preparedness by their previous education, are all key factors underpinning the provision by HEIs of skill support initiatives (Haggis and Pouget, 2002; Ganobcsik-Williams, 2006; Wingate, 2006). Academic support which facilitates the development of students’ academic skills should be embedded within learning materials (Duranton and Mason, 2012; Alias and Rahman, 2005). This helps ensure students have access to relevant resources at appropriate stages of the learners’ needs-expectation continuum (Alias and Rahman, 2005). However, the literature suggests most HEIs provide ‘bolt on’ (Bennett, Dunne and Carré, 2000) skill support in learner support centres where

generic support is offered by non-academic staff. This type of generic support, Wingate (2006) argues, is of limited value to students because knowledge is discipline-specific, therefore skill support needs to be contextualised to the content in students' courses. However, Wingate, Andon and Cogo (2011) suggest that embedding writing skill support into HEI curricula in the UK remains limited. They claim a variety of obstacles in implementing this form of support; primarily because there are lack of good practice examples, but also a reluctance on the part of tutors to take on what is perceived as additional workload, together with demands on time for subject teaching. Lack of tutor expertise in instructing students in their writing skills and techniques (Goodfellow, Strauss and Puxley, 2012; Wingate, Andon and Cogo, 2011) is also a key issue for academic staff who are already struggling to meet challenging workloads, which may be the rationale for HEIs utilising generic skill centres. Universities introduce study skills support in a variety of formats, yet these projects tend to be financially or technologically driven and may not meet students' needs or expectations. Furthermore, evidence suggests students require readily accessible and individualised support from well-trained tutors (Smith, 2004; Ehlers, 2004; McPherson and Nunes, 2004). Technology plays a significant role in the tools available to deliver skills support, although these too should be contextualised to the level and field of study (Goodfellow, Strauss and Puxley, 2012).

Review of the literature in which quality assurance mechanisms are explored highlights differences between evaluating students' experiences and their expectations of higher education. Gilroy, et al. (2001) explain the importance of HEIs matching their provision to students' expectations, although this presents significant challenges because students have limited understanding and expectations of their distance learning course (Baxter, 2012) since their expectations are likely to be based upon their previous educational experiences (Dearnley, 2003). In addition to this, the typical ODL student profile makes it extremely difficult for HEIs to meet the expectations of students with such diverse cultural, professional and educational backgrounds. The literature identifies commonality in the determinants of a quality student experience across campus-based and ODL deliveries, but interactions with tutors are a significant factor in contributing to a positive student experience.

The types of support required by all students can broadly be categorised as personal or emotional, academic, technical and social, with tutors playing a fundamental role in providing this support. However, a key requirement for success in online learning is the need for students to become autonomous, self-directed learners. Ludwig-Hardman and Dunlap (2003) suggest students need explicit direction to help them develop these skills and they advocate staged support to provide 'scaffolding' in the initial stages of

students' learning. Diagnostic skill assessment tools can help students and tutors identify learners' strengths and weaknesses prior to the start of their course, although it is difficult to assimilate whether these truly reflect students' skills in light of their lack of understanding and expectations for online learning. Social interaction is crucial in promoting self-directed learning and early opportunities for initiating interaction between tutors and students help facilitate this. Induction for online learners helps to reinforce these social interactions as well as providing student networking opportunities, introducing students to the online learning environment and helping them feel part of the university. Motivation is also a significant success factor for ODL students. In fact Simpson (2008) suggests maintaining students' motivation is more important than providing remedial study skill support which has a tendency to be perceived negatively by students. He advocates that where skill support is provided at the start of a course, tutors should proactively follow this up with frequent emails to ensure students' motivation is maintained.

It is evident from the literature that the concept of quality is complex and determined by each stakeholder's perspective. For this reason, quality of the student experience has been explored from a variety of perspectives. QAA standards provide a benchmark to help reassure the public and prospective students about the quality of service they can expect from an HEI. However, the very nature of standards potentially leads to an acceptance by an HEI of the level of quality achieved as opposed to engendering an ethos of quality improvement (Nightingale and O'Neil, 2012). The NSS seeks to inform prospective students about the quality of education provided by an HEI based on previous students' experiences, although the overall satisfaction score is potentially misleading due to its lack of specificity about individual courses. The effectiveness of the NSS as a tool for evaluating ODL students' experiences is debatable due to generalised questions aimed at campus-based students, as well as the phraseology of the options for response. Module evaluation potentially provides a more effective quality assurance tool for facilitating quality improvement when contextualised to ODL deliveries, although the use of generic mechanisms across an HEI is common practice (Jara and Mellar, 2007).

A variety of methodological approaches have been encountered within this review of current literature, including case studies, grounded theory and phenomenological approaches. Much of the research in this review involved support for online learning, although in-depth critique of these sources revealed an element of student attendance such as blended learning or campus-based induction, with data collection frequently involving face to face interactions. A combination of quantitative and qualitative data were collected in some studies as a means of triangulating results. Methods for

collecting data have included interviews, student observations, focus groups, reflective diaries and questionnaires. Where questionnaires were utilised, these were primarily handed to students in a classroom setting or distributed by post. In compiling this literature review, very limited literature has been found in the field of tutor support to facilitate students' development of their academic skills. A gap in the literature therefore exists with a focus on academic skill development for students who never attend campus and employing fully online methods of data collection. This research study will contribute to the body of knowledge and extend it by uniquely capturing the voice of online learners and their preferences for academic skill development opportunities using fully online research methods.

Critical review of the literature has helped clarify current knowledge of the concepts relating to support for students who are geographically remote from the university. Thus, the following research questions have informed the conceptual framework:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

The conceptual framework

Critical review of the literature, combined with personal experiences and insights as an ODL tutor, contributed to the development of a conceptual framework for this study. The themes identified from critical review of the literature and presented in the conceptual framework gave theoretical perspectives to steer the research study and the choices and decisions made along the way (Trafford and Leshem, 2008). This section of the literature review chapter considers the principles which underpin conceptual frameworks, thereby informing the conceptual framework constructed for this research study and its impact on the study itself.

The literature lacks clarity about the nature of conceptual frameworks (Green, 2014; Ravitch and Riggan, 2012; Parahoo, 2014; Maxwell, 2013), not helped by the words 'conceptual' and 'theoretical' being used interchangeably, as well as confusion over what is described as a 'framework' or a 'model'. Robson and McCartan (2016) claim a conceptual framework is often developed as a diagram, although Parahoo (2014) refers to diagrammatic representations as a conceptual model. Maxwell (2013) also advocates a diagrammatic approach and is explicit about the need to show

relationships between different concepts, but warns against over use of two-directional arrows. Bloomberg and Volpe (2008) prefer a narrative approach, a written account which provides more detail about the key concepts than can be achieved via a diagram. However, Ravitch and Riggan (2012) suggest there is no 'right' way for presenting a conceptual framework because it is influenced by the researcher's decisions, perspectives and experiences, all of which help shape the conceptual framework.

Bloomberg and Volpe (2008) do not provide an explicit definition of a conceptual framework, choosing instead to explain in detail how a conceptual framework should be utilised. In their view a conceptual framework is very much a working tool. In light of the absence of a precise definition within the literature, this practical application of a conceptual framework was considered useful and was therefore adopted for this research study. In addition, Bloomberg and Volpe (2008) and Maxwell (2013) both describe the need to sub-divide the categories of a conceptual framework by using descriptors to make the categories more explicit. Consequently, using descriptors also favoured a narrative approach to the conceptual framework because of the breadth of issues identified from critical review of the literature and personal experience which impact on ODL students' development of their academic skills and thus the volume of the sub-divisions being considered within this research study.

The conceptual framework presented below (*Figure 2.1*) shows the key concepts related to what is already known about academic skill development for ODL students and what is going on with these concepts (Maxwell, 2013). Existing literature has not considered the relationships between each of these concepts and thus the importance of the conceptual framework is to highlight the concepts which contribute to academic skill development for ODL students. The conceptual framework therefore represents the current picture from the literature and personal experience. It includes the research problem (academic skill development for ODL students), the conceptual categories, descriptors which relate to each category and the relationship between each conceptual category and the research questions. The framework helps to shape the research process, inform the methodological approach and influence the data collection methods to be used. The conceptual framework will also inform the basis of a coding scheme and as such provides a structure for organising this study's findings, analysis, interpretation and synthesis of the findings (Bloomberg and Volpe, 2008).

Academic Skill Development for ODL Students		
Conceptual Category	Descriptors	Research Question
Academic skill development opportunities provided by the university	<ul style="list-style-type: none"> ➤ Generic information provided by the university ➤ Information provided by course tutors/module leaders ➤ Information available on the web for general access 	1
Skill support required	<ul style="list-style-type: none"> ➤ Personal/emotional support ➤ Academic support ➤ Technical support ➤ Social support 	2
Timing and trigger points	<ul style="list-style-type: none"> ➤ Induction ➤ Skills included within modules eg: scaffolding ➤ Students directed at specific points of the year eg: feedback following assessment, start of a module ➤ Assessment task triggers students to access skill support for 'new' skills 	3
Reasons for accessing skill support	<ul style="list-style-type: none"> ➤ Embedded within a module ➤ Not embedded within a module ➤ Proactively sought by student ➤ Remedial support suggested by a tutor 	4
Quality of learning experience	<ul style="list-style-type: none"> ➤ Facilitates learning <ul style="list-style-type: none"> ○ Tutor personal attributes ○ Tutor responsiveness ○ Contact with peers ○ 'Human' aspect of support ○ VLE activities ➤ Hinders learning <ul style="list-style-type: none"> ○ Tutor personal attributes ○ Tutor responsiveness ○ Time limitations for work-based learners ○ Not knowing tutors or support staff ○ Text-based learning rather than 'human' interaction ○ Inconsistency in VLE design ○ Ineffective induction ○ Lack of participation/engagement in the VLE 	5

Figure 2.1: Conceptual framework

Each of the categories of the conceptual framework and the descriptors for each category are directly derived from themes identified from critical review of the literature and informed by personal practice. These in turn informed the construction of the research questions. The first research question seeks to establish the academic skill development opportunities available to ODL students. Therefore, the logical conceptual category would be 'academic skill development opportunities provided by the university'. Research question two seeks to identify the academic skill development opportunities used by students, leading to the conceptual category 'skill support required'. The third research question attempts to determine whether there are specific points during the academic year which trigger students' access to academic skill development opportunities. The conceptual category 'timing and trigger points' encompasses this. Research question four seeks to establish the reasons why students access academic skill development opportunities; thus the conceptual category 'reasons for accessing skill support' is derived. Finally, research question five seeks to gain students' perceptions of whether the academic skill development opportunities they make use of contribute to their academic and personal development. The final conceptual category 'quality of learning experience' captures this, although this has been subdivided into 'facilitates learning' and 'hinders learning'. Each of the conceptual categories are further explained by bulleted lists of descriptors which represent educated guesses to the research questions. To some extent these lists reflect existing views as an ODL tutor and, although this highlights the potential for personal bias, these descriptors are also derived from the literature and thus support these personal views. Some of the descriptors are likely to be edited during data collection and analysis, whilst others will be added or deleted; thus the conceptual framework is a working document which will be continually refined during the research process.

Bloomberg and Volpe (2008, p.58) refer to "new relationships and perspectives" emerging from a conceptual framework, thus the conceptual framework will be reviewed throughout the research process, reflecting the iterative nature of research on practice. On completion of the research study (Chapter 7) this conceptual framework will be revisited in light of the study's findings and adapted into a practical tool which contributes to the existing body of knowledge in this field and can be utilised by all involved in academic skill development for ODL students.

Chapter 3 Methodology and theoretical approach

This chapter sets out the methodological approach used to explore academic skill development opportunities available to ODL students at the HEI at which I work, and students' perception of the contribution these opportunities make to their academic development and in meeting their needs and expectations. In seeking to understand academic skill development for ODL students, the study addressed the following research questions:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

The chapter begins with an explanation of the purpose of the study and justification for the mixed methods approach taken. It describes the students who were invited to participate and analyses the ethical considerations included in this research. The sampling strategies utilised for the quantitative and qualitative strands of the study are explained. The chapter goes on to describe and justify the methods undertaken in both strands of the study in order to elicit answers to the research questions, together with explanation of the tools used to facilitate analysis of the quantitative and qualitative data. The reliability and validity of the quantitative data and results are considered, as is the trustworthiness and credibility of the qualitative data and findings. Limitations of the study are also outlined.

3.1 Purpose of the research

The literature review revealed a variety of issues relating to academic skill development for all HEI students, irrespective of the mode or level of delivery. These include the notions that academic skill development is perceived to focus on rectifying academic weakness (Simpson, 2008) and skill development opportunities should be structured and embedded within course design (Duranton and Mason, 2012). Directing students to support services at specific points of their learning helps ensure support is appropriate for the stage of students' learning journey (Shillington, et al., 2012) and as their needs and expectations change with experience. Alias and Rahman (2005, p.1) refer to a learners' needs-expectation continuum, reinforcing the importance of tutors understanding learners' needs so as to facilitate their transition from "dependency to

achieving self-direction and personal control over their learning”. Ludwig-Hardman and Dunlap (2003) suggest students need to be explicitly taught and supported in helping them achieve the skills to become self-directed, autonomous learners; essential requirements for student success in ODL. They claim this is achieved by providing scaffolding in the form of structured support during the early stages of students’ learning and gradually relinquishing responsibility to students as they become more confident learners. Shillington, et al. (2012) advocate a package of support staged at intervals promotes academic confidence and capability, but they too argue tutors need to proactively link students with the services they might require.

Interestingly the literature also revealed commonality in students’ perceptions of the determinants of quality in both campus-based and ODL courses (Hill, Lomas and Macgregor, 2003; Tsinidou, Gerogiannis & Fitsilis, 2010), which broadly include interactions with tutors, course design, administrative processes and support mechanisms, although HEIs tend not to develop teaching and learning tools with the specific needs of ODL students in mind (Simpson, 2008). HEIs undoubtedly aim to develop quality services which are valued by customers, but as a pragmatist I believe it is important to develop ODL teaching and learning tools which *students* perceive as contributing to their academic and personal development. Surprisingly, very limited research has been published in the field of tutor support to facilitate students’ development of their academic skills. Thus, the key issues identified in the literature will provide a focus for this research study.

The purpose of this research was to explore academic skill development opportunities available to ODL students at the HEI in which I am employed, and students’ perception of the contribution these opportunities make to their academic development and in meeting their needs and expectations. The research aimed to investigate whether academic skill development opportunities are perceived by students to focus on rectifying academic weakness (as evidenced by the literature), to identify the opportunities available to ODL students at different stages of their learning and, to explore whether these opportunities make a positive contribution to students’ academic development.

The study used a mixed methods approach to build upon existing theory about academic skill development opportunities for ODL students. To date there is very little knowledge and explanatory theory about the academic skill development opportunities favoured by ODL students and their perception of the effectiveness of these opportunities in meeting their personal needs and expectations. The theory generated from this study is an original contribution to the knowledge base of academic skill development for ODL students. The study seeks to inform ODL teaching, learning and support strategies within HEIs, thereby enhancing the ODL student experience.

3.1.1 *Ontological position*

Coming from a scientific profession I hold the belief that laws or theories which govern the world can be objectively tested and verified. In contrast, I am also of the opinion that individuals construct their own subjective meanings as a result of their personal experiences. My philosophical stance appears to locate me between two traditional and opposing paradigms (Patton, 2002) of realism and constructivism. Mertens (2004, p.4) defines a paradigm as “a world-view that includes certain philosophical assumptions about the nature of knowledge”. In practice I find the concept of opposing paradigms unhelpful, primarily because philosophically I do not ‘fit’ within either, but also because I do not fully subscribe to the beliefs of each paradigm or the notion of dichotomies. Newman and Benz (1998) present an alternative perspective of a paradigm continuum with realism and constructivism at opposing ends of the continuum, although Creswell (2003) argues most researchers tend to veer towards either a realist or constructivist approach. Personally I veer slightly towards the constructivist end of the continuum, although I see robustness and validity in research involving a substantial number of participants and collection of numeric data. More importantly, my approach to any research would fundamentally depend on the nature of the research problem, thereby giving the impression of movement along the continuum to meet the needs of the research. Teddlie and Tashakkori (2009) refer to a QUAL-MM-QUAN continuum where three distinct research communities (not paradigms) are represented by overlapping circles (*Figure 3.1*). The characteristics of qualitative and quantitative approaches remain at opposing ends of the continuum to represent the purist qualitative (A) and quantitative (E) traditions. Teddlie and Tashakkori (2009) suggest a researcher’s point of entry onto the continuum depends on whether the research is exploratory (qualitative) or confirmatory (quantitative) in nature, whereas mixed methods research (C) requires movement across the continuum in pursuit of answers to research questions.

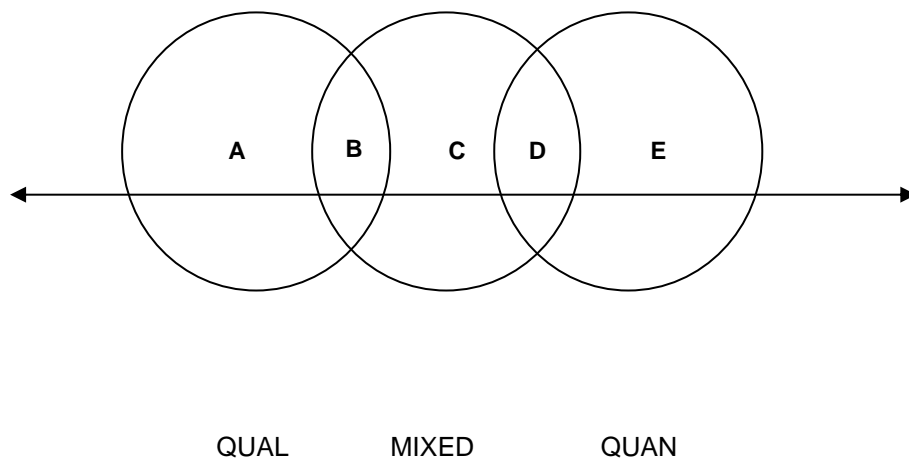


Figure 3.1: The QUAL-MM-QUAN continuum (Teddle and Tashakkori, 2009, p.28)

Epistemologically the opposing ends of these continua are represented by positivism and interpretivism (Gray, 2009). Positivist approaches seek facts or causes (Patton, 2002), research is conducted objectively, theory is used to generate hypotheses which can be tested (Bryman, 2012) and methodologies are chosen in which quantitative data are gathered (Waring, 2012). In contrast, interpretivist approaches utilise qualitative methodologies to gain 'naturalistic' data such as observation and verbal interactions. Qualitative data are concerned with understanding the meaning of data rather than the numerical properties of quantitative data (Smith, 2008). From a positivist stance I see value in attempting to quantify aspects of students' responses, whilst data analysis using an interpretivist approach will facilitate exploration and understanding of students' perceptions of their academic skill development. Use of both quantitative and qualitative methods aligns with my worldview and is pragmatic for this particular project.

This philosophical conundrum introduces the concept of pragmatism. Patton (2002, p.71) argues that paradigms are for purists, whereas pragmatism aims to supersede the allegiance to one or other paradigms "by increasing the concrete and practical methodological options for researchers". Pragmatism is not committed to a specific research philosophy or paradigm (Bloomberg and Volpe, 2008) but is concerned with the practical application of workable solutions to research problems (Patton, 2002). Pragmatism is most often associated with mixed methods research (Creswell and Plano Clark, 2011), with the focus being on the importance of the research question and the preference for adopting strategies that work in practice. Teddlie and Johnson (2009, p.73) describe pragmatism as a "philosophical partner" for mixed methods research where choice for one paradigm is rejected in favour of consideration of the perceived strengths of both. As a pragmatist I do not view mixed methods research as a paradigm,

simply a practical mechanism for combining methods to provide the best opportunity for obtaining useful and workable answers to my research questions (Gray, 2009). Tashakkori and Teddlie (2010) identify mixed methods researchers as problem solvers. Although I identify with this personal characteristic I do not seek to 'solve' this perceived problem because the concepts relating to academic skill development for ODL students identified in chapter 2 show this to be a multi-faceted problem and, therefore, not something which can be 'solved' at a personal level. That said, the purpose of this research study is to gain a greater understanding of academic skill development for ODL students at the HEI at which I work, thereby contributing to the current body of knowledge in the research community and potentially influencing policy and practice within my organisation. On this basis the use of a mixed methods approach is pragmatic, enabling me to reconcile ontological and epistemological challenges and utilising the strengths in collecting and analysing quantitative and qualitative data.

3.2 Mixed methods research

3.2.1 Methodological approach

Johnson, Onwuegbuzie and Turner (2007, p.123) amalgamated the views of 19 researchers to define mixed methods as:

"...a type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (eg: use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration".

However, the concept of mixed methods research as a paradigm remains under debate even amongst the proponents of mixed methods research (Niglas, 2010), irrespective of whether paradigms are based on philosophical categories or methodological distinctions. Freshwater and Cahill (2013, p.4) even describe the concept of a paradigm as "elusive", which they attribute to "a series of slippery definitions" of the term as well as continuing debate in the definition of mixed methods research. Newby (2010) argues the case for mixed methods research as a methodology, a process for collecting and analysing data, claiming that opposing viewpoints such as single or multiple realities and deduction and induction should not be able to co-exist. Despite claims of incompatibility between quantitative and qualitative data (Bergman, 2008), mixed methods research aims to integrate the two approaches so as to minimise inherent weaknesses and combine the strengths of each approach (Johnson and Onwuegbuzie, 2004). Defining mixed methods research is complex and dependent upon what is mixed and where the mixing occurs (Creswell, 2010), namely, the data collection stage, data collection and analysis stages and, at all stages of the research process (Gray, 2010). Bergman (2008) suggests some theorists dispute the

appropriateness of the term 'mixing' since mixing of qualitative and quantitative elements does not occur; instead they are blended, meshed or combined. This research project adopted the stance of Tashakkori and Creswell (2007, p.4) for "integrating the findings and drawing inferences using both qualitative and quantitative approaches or methods".

One of the strengths of mixed methods is the ability to look for consistency by cross checking findings from both qualitative and quantitative methods (Patton, 2002). This is the notion of 'triangulation' which seeks to converge and corroborate data, thereby increasing the validity and strength of research findings (Biesta, 2012). Teddlie and Tashakkori (2009, p.32) define triangulation as "the combinations and comparisons of multiple data sources, data collection and analysis procedures, research methods, and inferences that occur at the end of the study". However, triangulation becomes problematic when failure to corroborate data occurs, or where results of multiple methods do not converge or support the same conclusions (Denzin, 2010), thus leading to concerns about how any inconsistencies are managed (Bryman, 2012). There was no attempt in this research study to use both quantitative and qualitative methods to triangulate the data because of the concerns for a potential lack of corroboration. Instead, an alternative concept of 'completeness' (the notion that a more comprehensive account of the area of research is achievable with quantitative and qualitative methods) (Bryman, 2012) was considered more appropriate for this research study. However, completeness also has its failings since it implies that gaps left by one method will be filled by another – the focus seeming to be on minimising weaknesses rather than employing the strengths of different methods. In this research study quantitative and qualitative methods were employed specifically to address the research questions, with opportunity taken to 'integrate' results at different stages of the study, thereby gaining more insightful answers to the research questions (Ivankova, 2013).

Potential weakness in mixed methods research as an approach for this study were acknowledged, although advocates of mixed methods research (Creswell and Plano Clark, 2011) refer to these as 'challenges' to be overcome instead of weaknesses. Gray (2009) suggests commonalities and differences in data may be misinterpreted when the methods used are incompatible. The methods used in this project are well established and frequently used in combination in both quantitative and qualitative research. The personal challenge was my limited experience in collection and analysis of both quantitative and qualitative data (Bergman, 2008; Creswell and Plano Clark, 2011). Training facilitated my understanding in the issues of rigour in quantitative research and credibility and trustworthiness in qualitative research (Creswell and Plano

Clark, 2011). The time required to analyse both sets of data was an important consideration as a lone researcher (Newby, 2010), although the sequential nature of the design allowed data to be analysed in different phases, with mixing or merging occurring at a later point (Creswell and Plano Clark, 2011).

Mixed methods research is characterised by the use of frameworks or typologies which shape the research design and analytic processes (Teddle and Tashakkori, 2012). Four basic typologies include: parallel mixed designs, conversion mixed designs, sequential mixed designs and transformative designs. Further typologies are created from these basic 'families' with a notational system relating to the way in which quantitative or qualitative methods are used. These include: whether a project is quantitatively (QUAN) or qualitatively (QUAL) driven, which aspect of the study is dominant (depicted as QUAN or QUAL) and which is less dominant (depicted as quan or qual) and whether a project is sequential (identified with an arrow →) or concurrent (identified with a + symbol) (Teddle and Tashakkori, 2009).

A challenge in mixed methods research, particularly for a novice researcher, is in trying to design a study to 'fit' one of these typologies (Bryman, 2012). Creswell and Plano Clark (2011) assign descriptors to their typologies which seek to explicitly identify the nature of the design, such as *explanatory* (QUAN) or *exploratory* (QUAL) sequential designs depending on the dominance assigned to the first strand of the study.

Personally I welcomed a structured approach, although I found the typologies too prescriptive because once again my research did not 'fit' a specific typology. However, Teddle and Tashakkori (2009) encourage researchers to select the best typology available which can be adapted to fit the research problem. The research design for this study is explained in terms of equal dominance of the quantitative and qualitative elements for this exploratory research.

3.2.2 *Mixed methods design*

This study utilised a sequential QUAN→QUAL design which is represented by the schematic diagram in *Figure 3.2*. The first strand generated quantitative data (QUAN), the second generated qualitative data (QUAL). Numeric data were collected in strand 1 via an online questionnaire to provide an overview of the academic skill development opportunities available to students, the different opportunities students make use of, the frequency with which these opportunities are used and a 'score' to indicate students' perception of the value of these opportunities in contributing to their academic development and meeting their needs and expectations. Results and findings from the online questionnaire informed the development of strand 2, represented by the linear arrows in *Figure 3.2*.

Qualitative data were generated in strand 2 via online, audio-visual, semi-structured interviews. Rich descriptions from this data provided depth and context to the results generated from the QUAN data, thus providing opportunity to confirm or disconfirm inferences or to clarify the QUAN results (Teddlie and Tashakkori, 2009). This included utilising the QUAL data to explain quantitative trends and clarify some of the unexpected statistical data. This process is represented by the ‘interact’ arrows in *Figure 3.2*.

Having completed the interaction phases, the final stage of data analysis involved integration of the QUAN results and QUAL findings to promote a fuller understanding of the research problem (Tashakkori and Creswell, 2007). Integration was encouraged by considering the QUAN and QUAL data thematically across both sets of results in addition to presenting separate results and findings from strands 1 and 2 respectively (Bryman, 2012).

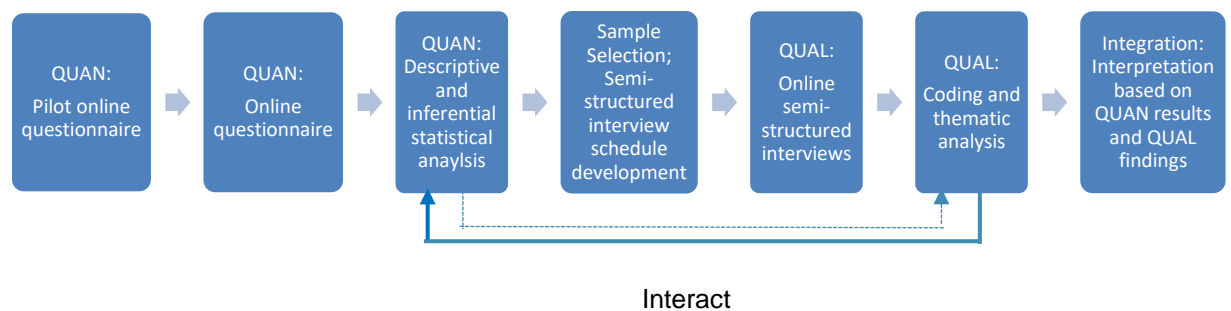


Figure 3.2: Study design and processes (adapted from Ivankova, 2013, p.7)

The research problem drove the research questions which were central to the project; giving it direction and coherence, identifying boundaries, providing a framework for writing up the project and pointing to the data that were needed (Punch, 2014). The research questions were generated with an explicit mixed methods approach (Tashakkori and Creswell, 2007). Separate quantitative (questions 1 and 2) and qualitative (questions 3, 4 and 5) questions drove the QUAN online questionnaire, which in turn informed the QUAL online, audio-visual, semi-structured interview schedule (Gray, 2009; Creswell and Plano Clark, 2011). The quantitative results and qualitative findings were integrated in the final stage of the study to create meta-

inferences, thus providing more complete and insightful answers to the research questions (Ivankova, 2013).

3.2.3 *Research participants*

Ethical approval was gained from the Faculty Research Ethics Panel (FREP) prior to participants being approached or any data collected, including the pilot study (Anglia Ruskin University, 2014). This process ensured careful consideration to the selection of participants, including minimising harm to participants and myself as well as considerations of anonymity, confidentiality and storage of data. Participants for each strand were sent an information sheet to explain the purpose of the research and to help them make an informed decision about participation. The language of the information sheet was crucial in promoting participants' understanding and facilitating their willingness to participate (Miller, 2012).

Participants were invited from students registered to start ODL courses at the HEI in which I am employed in September 2013/14; a population (N) of 750 students. Having established the total population of ODL students within that timeframe, the following eligibility criteria were applied:

a) Inclusion

- Full-time and part-time delivery
- Undergraduate (single honours)
- Postgraduate taught

Selecting students in their second or final year of study provided an overview of the academic skill development opportunities accessed by students as their needs and expectations change across the duration of their course (Alias and Rahman, 2005) and avoided burdening students who can feel overwhelmed in their first year of study.

The inclusion criteria encompassed Foundation Degrees and thus, one of the courses I lead. Consideration was given to excluding this specific group of participants on the basis of ethical and insider complexities such as power and coercion towards a group of students with whom professionally I am in direct contact (Trowler, 2011). As an insider researcher I arguably held a more powerful position from participants' perspective, although Cohen, Manion and Morrison (2007) suggest participants also hold a level of power, particularly during interview situations. The likelihood of interview bias in strand 2 was also considered, whereby participants might change their responses as a result of pre-formed ideas about my preferences. Mechanisms to administer each strand, as well as personal awareness during online interviews in strand 2, helped reduce these ethical considerations. Ultimately the decision was taken

to include these students because of their ability to opt out simply by non-response to strand 1. All students who chose to participate were afforded confidentiality and anonymity and thus the potential to explore students' perception of the academic skill development opportunities available in my course was taken.

b) Exclusion

- Undergraduate Certificate
- Postgraduate Certificate
- Undergraduate 'top up' degrees (Level 6 only)
- Associate students (those studying isolated modules for professional development)
- Franchise or external partner organisations
- Postgraduate Research

The decision to exclude students registered on one year courses or single modules was primarily to avoid burdening students within their first year of study which can be a challenging period. Exclusion of students registered on 'top up' courses (n=90) prevented opportunity to explore practice across progression routes, but in my experience as a 'top up' degree course leader, students infrequently enter Level 6 following progression from courses delivered at the HEI in which I am employed. Instead, direct entry is usually via diverse educational routes and varying learning experiences at Levels 4 and 5 which may have influenced the data.

3.2.4 *Sampling strategies*

Strand 1

Non-probabilistic sampling sought to recruit participants representative of the online distance learning population (Creswell and Plano Clark, 2011) at the HEI at which I work. This may have included students from a variety of backgrounds and encompassing differences in sex, gender, age and ethnicity. The absence of face to face interaction in ODL means these personal demographics are often an unknown factor, therefore it was not considered important to establish this information from participants. Although the intention was to obtain a sample representative of the ODL community with the university (Teddlie and Yu, 2007), in reality this proved to be impossible. Knowledge of the university as an insider research proved useful in being able to undertake a substantial amount of preliminary investigation in an attempt to establish the size of the distance learning group. For example, several courses recorded as 'distance learning' on university systems were personally known to include elements of face to face attendance, thus it became impossible to decipher courses where no form of campus-based attendance was required. Whilst the sample of

participants may not have totally represented the ODL student population, the decision was therefore taken to invite all students registered on 'distance learning' courses using the eligibility criteria (section 3.2.3). The main purpose of this research study was to learn directly from ODL students the issues they face in developing their academic skills and, although attempts were made to analyse the numerical data, claims of generalizability were unlikely (Muijs, 2011). That said, areas worthy of further exploration were identified.

Muijs (2011) suggests non-response in online surveys can be substantial, resulting in less statistical power to test hypotheses. He considers participants are more likely to respond if they have time, an interest in the topic or if they have a particular (primarily negative) perspective they wish to convey. Baumgartner and Morris (2010) also claim response rate is influenced by participants' level of interest in the topic or its relevance to them. Non-response is a problem because participants who choose not to respond are systematically different to those who do (Sue and Ritter, 2012). Blakie (2003) argues that as response rates decline, data become less reliable and the potential for bias increases. Cohen, Manion and Morrison (2007) agree the absence of non-respondents changes the characteristics of the remaining sample and leads to concerns for bias. In view of these factors and the potential for cases to be lost at various stages of the study (such as non-completion of questions), as large a sample as possible was sought (Gorard, 2001). Application of the eligibility criteria reduced the sample (n=670), as did exclusion of intermitting students or those who had withdrawn (n=522). Despite attempts to maximise responses (section 3.3.1), the response rate was very low (n=43) and this influenced the validity of strand 1 (Teddle and Tashakkori, 2009; Tymms, 2012). However, Gorard (2010) argues the number of cases does not necessarily relate to the method of data collection and he claims issues such as sampling error and power relate primarily to random sampling methods. On a personal level the response rate did lead to concerns for validity in this research study, particularly since use of numbers provides the opportunity to assess the volume of evidence in the data, as well as the ability to convey diversity of perspectives (Maxwell, 2013). However, as a pragmatic mixed methods researcher with a slight veering towards constructivism, all responses were considered of value in terms of answering the research questions (Teddle and Yu, 2007). Greater response rates do not necessarily capture more reliable or valid data and strategies used to analyse the data and the statistical techniques employed are of importance and can counter the arguments about validity. In addition, having collected data I would consider it unethical to discard the important voice of respondents who made the time to communicate their opinions. Whilst the response rate was disappointing, responses were received from students studying the range of academic levels within the inclusion criteria and across

all faculties. Furthermore, 15 of the 43 respondents expressed willingness to participate in strand 2, providing opportunity to clarify responses to 34% of the questionnaires.

Strand 1 pilot

The pilot participants were invited from a Masters' level course (n=26) who were excluded from the strand 1 data collection. The rationale for selecting students from one course was twofold, namely:

- To facilitate data analysis since all students would be exposed to the same course specific academic skill development opportunities. Variation in students' experiences were to be expected, but this was greatly reduced compared to participants being invited from multiple courses.
- To elicit a workable response rate based on the knowledge that questionnaire response rate might be as low as 20% (Tymms, 2012), courses with cohorts >20 or <50 were considered. Two courses fell within this range, one of which was my Foundation Degree. In view of the ethical considerations previously discussed, the decision was taken to invite students from this course to strand 1 where any responses would be less likely to be identifiable amongst respondents from other courses.

The response rate (n=6) was fair (23%), with two respondents agreeing to participate in strand 2.

Strand 2 sampling

Participants were selected from respondents to the pilot and to strand 1 who authorised their willingness to participate in strand 2 via a closing question on the online questionnaire. The intention had been to make a purposive sample of participants on the basis of initial analysis from the online questionnaires and my perception that individual respondents' views would offer depth of information or a unique perspective of the research problem (Collins, 2010). A minimum (5) and maximum number of participants (15) were determined by the limitations of working as a lone researcher and the time required to analyse data (Bryman, 2012; Gray, 2009). Since the number of students volunteering to participate from the pilot and strand 1 exceeded the maximum (n=17), purposive sampling was considered. However, in light of the low response rate to strand 1 and concern for the risk of potentially losing valuable rich data from the two students not selected, as well as the possibility of participants withdrawing prior to the event, the decision was made to invite all volunteers to participate in the strand 2 interviews. Five students responded to the invitation to participate in strand 2.

3.3 Data collection

This section provides analysis of the methods of data collection used for this mixed methods study, including consideration of the ethical issues associated with these methods. The purpose of the quantitative pilot study is also outlined. The results of the pilot informed the research design and are thus presented in this chapter; providing the opportunity to identify key findings, to consider the implications of these findings and to summarise changes made to the strand 1 online questionnaire in light of the pilot.

At the ethical approval stage the intention had been to seek permission from course leaders, acting as gatekeepers, to access their students (Ashley, 2012). Although gatekeepers were not involved in any aspect of the research study and no risks to them were envisaged, acknowledgement had to be given to potential concerns about organisational or personal motives of the study (Bryman, 2012). The intention to approach them was also one of courtesy. A variety of methods were used to elicit gatekeeper names within university systems, all of which proved to be unreliable or inaccurate. The decision was therefore taken not to contact gatekeepers since there was no requirement to do so, but to approach students directly. Course leaders were not informed about the study, but in recognition that students' anxiety about their academic skill development might be heightened by participating in the study, the Participant Information Sheet (PIS) (*Appendix 1* and *Appendix 2*) advised students to contact their personal tutor should they require support.

3.3.1 Strand 1 (QUAN) online questionnaire

Design of the online questionnaire had the potential to significantly impact on response rate as well as the type of analysis (Gorard, 2001). A variety of strategies to maximise response through the design and distribution of the questionnaire were employed, including testing the questionnaire with academic colleagues. Length of questionnaire can influence response rate, although Sue and Ritter (2012) suggest an engaging questionnaire is more important than its length in gaining complete responses. Testing the questionnaire confirmed a completion time of 10-15 minutes, thereby not making extensive demands on participants' time. Newby (2010) stresses the importance of emphasising the purpose and possible outcomes of the research to participants and the significance of their contribution. Creswell and Plano Clark (2011) suggest this provides reciprocity to participants for their willingness to participate. The purpose of the study was conveyed to participants via the Participant Information Sheet (PIS) (*Appendix 1*), explaining that their opinions would contribute to future developments to support ODL students at Anglia Ruskin University. Hesse-Biber and Griffin (2013) suggest response rates for user-friendly online questionnaires tend to have a higher

response rate than mail-based administration. Online delivery of the questionnaire held a number of advantages, namely: speed of distribution and turnaround time, cost, environmental considerations, ease of access to geographically distributed participants and responses in an easily readable format (Hesse-Biber and Griffin, 2013; Sue and Ritter, 2012).

The online questionnaire was designed using Survey Monkey and comprised closed questions designed to collect factual data about academic skill development opportunities accessed by students (*Appendix 4*). The conceptual framework (*Figure 2.1*) underpinned the development of the questions which were also devised to address the research questions. Questionnaires have traditionally been considered a quantitative method and the use of closed questions distinguished this as a quantitatively driven questionnaire (Creswell, 2003). Questionnaires are best utilised to gather simple facts rather than attempting to elicit attitudes, opinions or explanations and are indicated when the data required to address the research problem does not already exist (Gorard, 2001). Factual data were gathered about the academic skill development opportunities accessed by students. Preliminary data were gathered via the use of ordinal scales regarding the frequency of students' use of academic skill development opportunities, their satisfaction with the opportunities they had used and their perception of those opportunities in contributing to their academic development. Scale categories were selected based upon the research question under consideration and ordinal data introduced the ability to rank responses (Sue and Ritter, 2012). For example a five point Likert scale using the categories 'never', 'rarely', 'sometimes', 'often' and 'always' was used to gather data about the frequency of students' use of academic skill development opportunities. Potentially more specific time-bound categories could have been used (eg: 'daily', 'weekly', 'monthly'), but participants included those studying both full and part time. Consideration therefore had to be given for part time students who might only engage in study once a week, so their response of 'weekly' could be as important as a full time student's response of 'daily'. It also has to be acknowledged that the timeframe between respondents' use of academic skill development opportunities and their completion of the questionnaire may have influenced their recollection of their frequency of use of the opportunities. As a result of these factors, the more generic ordinal scale was chosen.

Ordinal scales have their weakness, primarily because the differences between each 'score' cannot be assumed to be equal (Hambleton, 2012) and respondents' understanding of categories such as 'often' and 'frequently' may differ (Cohen, Manion and Morrison, 2011). These challenges in the use of scales are always a problem with questionnaires (Oppenheim, 1992) and are not unique to this research study. Despite

this, the numerical data did communicate an order of students' perception of their academic development by enabling respondents to voice a degree of response and provide a mechanism for differentiating their responses (Cohen, Manion and Morrison, 2007) which were clarified during strand 2.

The online questionnaire enabled collection of quantitative data from geographically remote students. Participants were sent an email, via their university email account, inviting them to participate. Thoughtful timing of emails (Sue and Ritter, 2012) sought to minimise intrusion on students' time during highly stressful periods of the academic calendar, such as immediately prior to submission of assignments. The email (*Appendix 7*) included a Participant Information Sheet (*Appendix 1*) and a link to the online questionnaire. Consent to participate was implied via completion of the online questionnaire. Participants were initially given a three week period (February 9th to February 28th, 2015) to complete the questionnaire asynchronously, thus providing some flexibility to promote response (Hesse-Biber and Griffin, 2013). By February 23rd only 15 responses had been made, so the decision was taken to extend the period of availability by two weeks (amended closing date March 13th) in an attempt to elicit further responses. Students were emailed on February 23rd to thank those who had already participated and to inform others that the closing date had been extended. A further email was sent to all participants on March 9th following email contact from three students asking to be re-sent the Participant Information Sheet. Interestingly this resulted in a spike in the volume of responses (n=21 on March 9th). Review of the responses over the period of questionnaire availability revealed an increase in responses corresponded with the dates the emailed invitations were sent. In light of this, consideration was given for extending the period of availability even further, but on balance this was dismissed, in part to avoid excessive emails which might have been perceived by students as intrusive or making additional demands on their time, but also due to the practical necessity for preliminary analysis of the data and organising strand 2. The final response rate was 8% (n=43).

A key factor in the use of questionnaires is in the ability to maintain participants' anonymity (Sue and Ritter, 2012), thus creating an element of trust and leading to more truthful responses (Gorard, 2001). Although the method of administering the questionnaire involved directly emailing students, data were collected within the online software, thereby providing anonymity for respondents. The functionality of Survey Monkey enabled analysis of individual responses, but these were not traceable to specific individuals; the only exception being those students who expressed their willingness to participate in strand 2 and who provided their email address. This led to the identification of one participant who responded to the strand 1 questionnaire twice.

Consideration was given for discarding both responses, but in view of the low response rate the decision was taken to retain both responses and to seek clarification of any discrepancy between the two responses during the strand 2 interview. This situation highlighted the potential for duplication of other students' responses to the strand 1 questionnaire. Sue and Ritter (2012) refer to the conflict between the need for maintaining participants' anonymity and eliciting only one response per participant. They suggest that whilst measures can be taken to prevent duplication of responses in email surveys, this is not possible with online surveys. It was impossible to establish with any level of certainty whether other duplicate responses occurred, but the data were analysed on the assumption that no other duplication took place. The participant's duplicated responses will be discussed further in chapter 4.

3.3.2 *Strand 1 pilot*

Since data from the online questionnaire informed the schedule for the strand 2 online semi-structured interview, the impact of the questionnaire on the robustness of the entire research study was significant, thus a pilot online questionnaire (*Appendix 5*) was carried out utilising the sampling methods identified in section 3.2.4. The purpose of the pilot was to test the adequacy of the online questionnaire as a research instrument. Testing of the pilot questionnaire was undertaken by academic colleagues with expertise in ODL, thereby helping to ensure content validity (Heavey, 2015). Colleagues were asked to evaluate the pilot questionnaire for readability, synergy between content and the research questions and length of time for completion. Testing the pilot enabled refinement of questions prior to strand 1 and provided opportunity for identifying potential problems with the proposed methods (Teddle and Tashakkori, 2009).

The pilot online questionnaire was initially available to participants for a three week period (October 10th to October 31st, 2014). By October 27th the response rate was 19% so the decision was taken to extend the period of availability by two weeks (amended closing date November 14th) in an attempt to elicit additional responses. A further email was sent to participants to thank those who had participated thus far and to inform others that the deadline had been extended. This strategy resulted in one additional participant completing the online questionnaire, a final response rate of 23% (n=6).

At the end of the pilot period all students were emailed to thank them for their time and participation. Two students expressed their willingness to participate in strand 2. These students were emailed to inform them that they would be contacted during March 2015 regarding participation in strand 2.

3.3.3 Pilot results

Responses were received from students (n=6) studying one Masters' level course with the Lord Ashcroft International Business School (LAIBS). This provided consistency in course delivery between participants, thus reducing some of the variation in methods used to help students develop their academic skills than would otherwise have been achieved had the pilot participants been invited from multiple courses. It is important to acknowledge the potential weakness of this small group of responses, such as the possibility that the same tutor is represented and thus the same general student experience rather than six different experiences. However, the primary remit for the pilot was to test the adequacy of the questionnaire as a data collection tool and, to that end, the pilot met this goal.

The pilot questionnaire did not include a question to identify students' faculty. Following the pilot, the online questionnaire was edited to include a question asking students to indicate their faculty of study in anticipation that comparisons might be drawn about academic skill development opportunities available to students within and across faculties.

i. Students' definition of academic skills

Critical review of the literature failed to identify a clear definition of 'academic skills'. Since participants' understanding of this term was key to the research study, clarification was sought via the online questionnaire. Participants were provided with a list of options from which they were asked to provide a 'yes', 'no' or 'don't know' response. This list was derived in part from skills identified in the literature, as well as personal experience.

When asked what they consider to be 'academic skills', respondents voiced a range of opinions (*Figure 3.3.3i*), although there was consistency in their views about literature searching, referencing skills, planning assignments, evaluating literature sources and critical writing. Interestingly, 'time management' showed most variation in responses, with only two respondents viewing it as an academic skill. This is in contrast to the literature which suggests time management is a skill required by all higher education students (Ludwig-Hardman and Dunlap, 2003; Dearnley, 2003). Students' responses may be indicative of their level of study, perhaps having established this skill in previous courses.

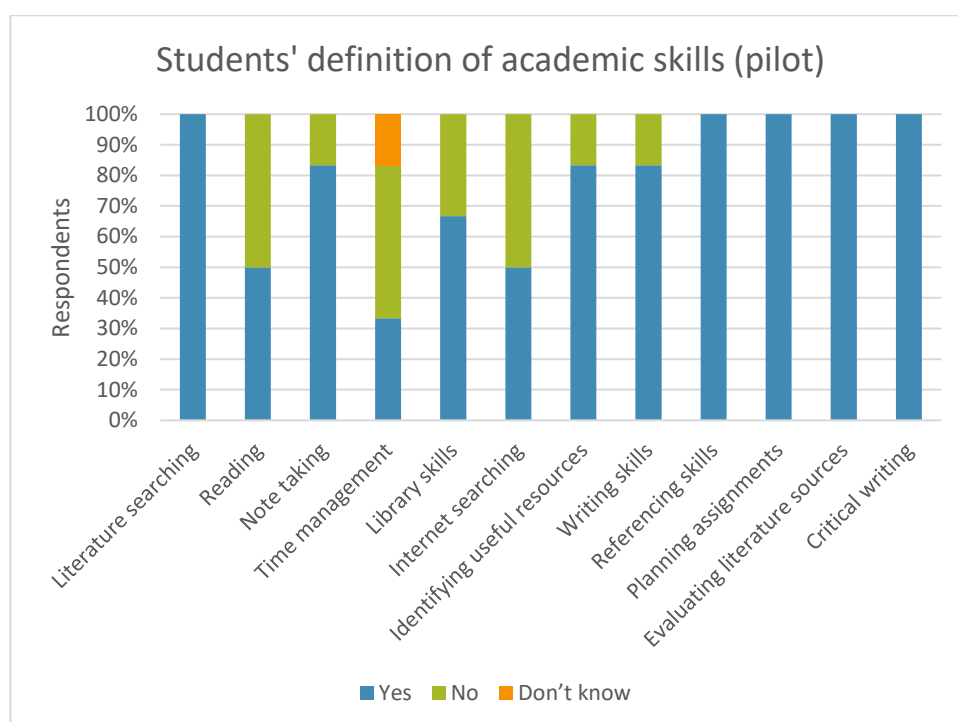


Figure 3.3.3i: Pilot students' definition of academic skills

ii. Academic skill development opportunities available to students

Participants were asked about the academic skill development opportunities available to them to address research question 1¹. Participants responded fully to all categories of this question (*Figure 3.3.3ii*). Since the pilot sample was purposively selected from the same LAIBS Masters' level course, there are some notable results. All respondents agreed about the availability of academic skill development opportunities in the following categories: email contact with tutors; formative feedback following assessment; VLE discussion forum and internet resources. In contrast, five categories elicited 'yes', 'no' and 'don't know' responses. Of particular note were librarian support, student services tutorials and the IT helpdesk, which are all generic university services. However, discrepancies between students' awareness of the availability of telephone or online chat tutorials with tutors were also striking and potentially indicate a flaw in the way the availability of these support mechanisms are communicated to students. For example, the availability of tutorials might be discussed via personal email communication between students and tutors rather than being advertised on the VLE.

¹ Research Question 1: What academic skill development opportunities are available to ODL students?

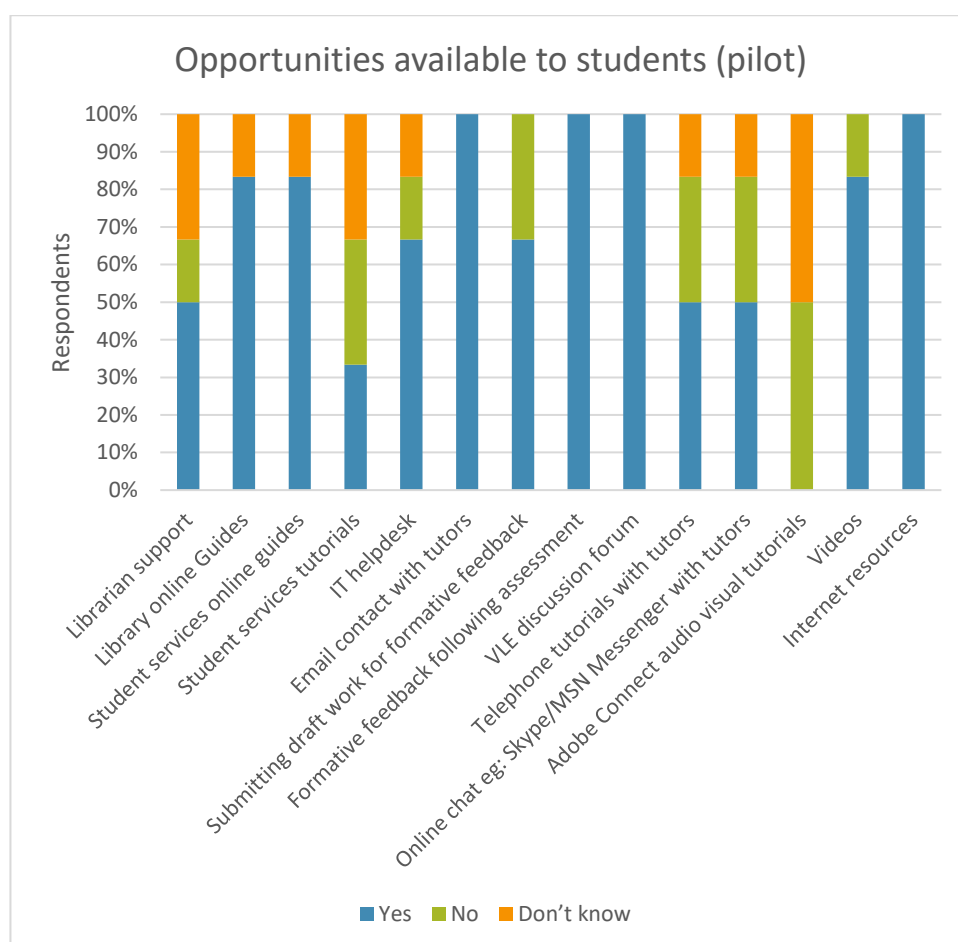


Figure 3.3.3ii: Academic skill development opportunities available (pilot)

iii. Academic skill development opportunities used by students

Participants were asked to identify the academic skill development opportunities they used to address research question 2². Pilot participants responded fully to all categories of this question (*Figure 3.3.3ii*). All respondents used email contact with tutors, feedback following formative assessment, the VLE discussion forum and internet resources. No students used telephone tutorials with tutors, although three of the six students were aware of their availability. It is impossible to draw any conclusions from this, other than to suggest those three students made use of other opportunities for communicating with their tutors such as via email, the VLE or online chat. The lack of use of Adobe Connect audio visual tutorials with tutors is unsurprising since students suggest it is either not available, or they are unaware of its availability. Personal experience in the use of Adobe Connect confirms its availability, although this is not on a university-wide scale and tutors are required to request access. Inclusion of 'Adobe Connect audio visual tutorials' as an academic skill development opportunity is

² Research Question 2: What academic skill development opportunities do students use?

therefore a result of personal usage and does not reflect its general availability across the HEI.

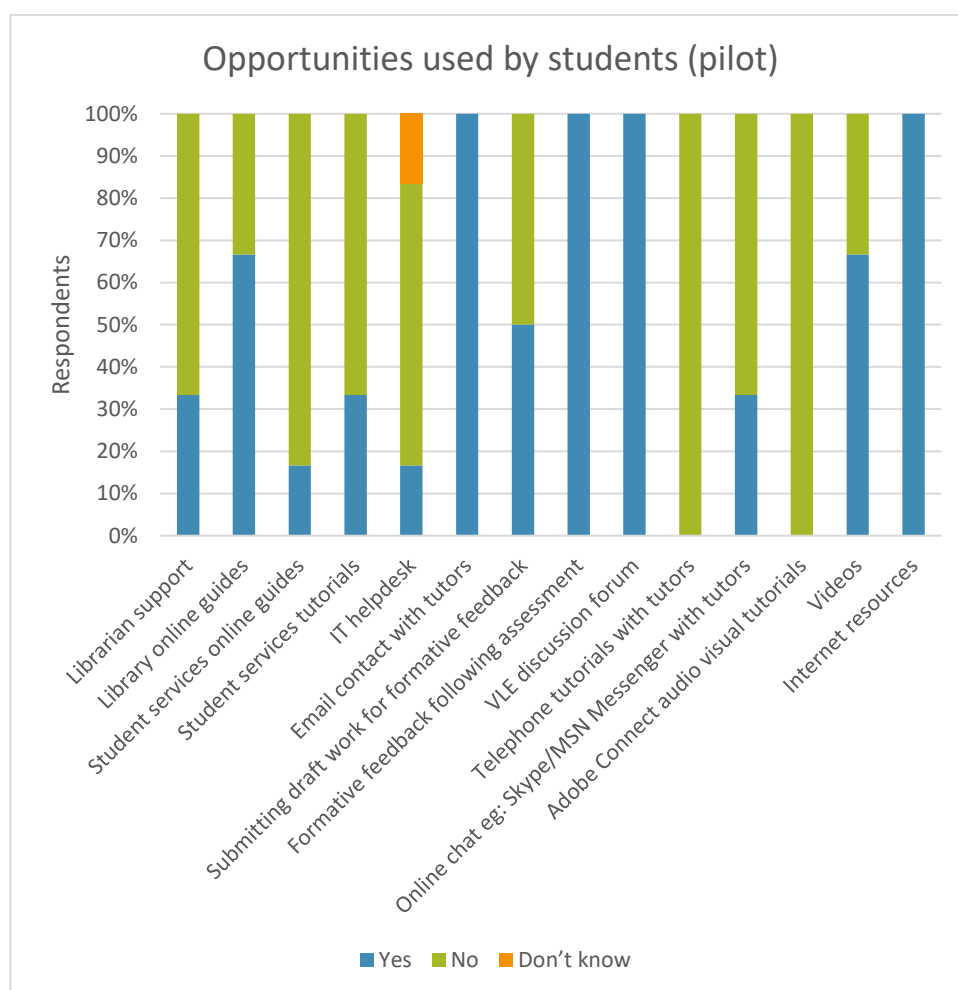


Figure 3.3.3iii: Academic skill development opportunities used by students (pilot)

iv. Frequency of academic skill development opportunity use by students

Participants were asked to indicate, using a five point Likert scale, the frequency with which they accessed the academic skill development opportunities available to them. The strand 2 interviews provided opportunity to ask participants if there were specific points during a term when they would access academic skill development opportunities (to address research question 3³) or if these opportunities were embedded as part of the curriculum. Asking participants to indicate the frequency with which they accessed academic skill development opportunities enabled more rigorous analysis of the processes used by students, such as whether opportunities are a 'one off' occurrence or a more continuous developmental activity.

³ Research Question 3: When do students access the different opportunities available?

Most pilot participants responded fully to all categories of this question, but the number of participants are identified for categories where full responses were not made (*Figure 3.3.3iv*). Results show that respondents 'never' (n=4) or 'rarely' (n=2) accessed librarian support, and 'never' (n=5) or 'rarely' (n=1) used the IT helpdesk. The most frequently used support opportunities were formative feedback following assessment, the VLE discussion forum and internet resources. These results are perhaps unsurprising for Masters' level students who would be expected to demonstrate skills in self-directed rather than tutor-directed learning, but comparison with the strand 1 results will potentially help clarify this or highlight whether this represents a trend for ODL students.

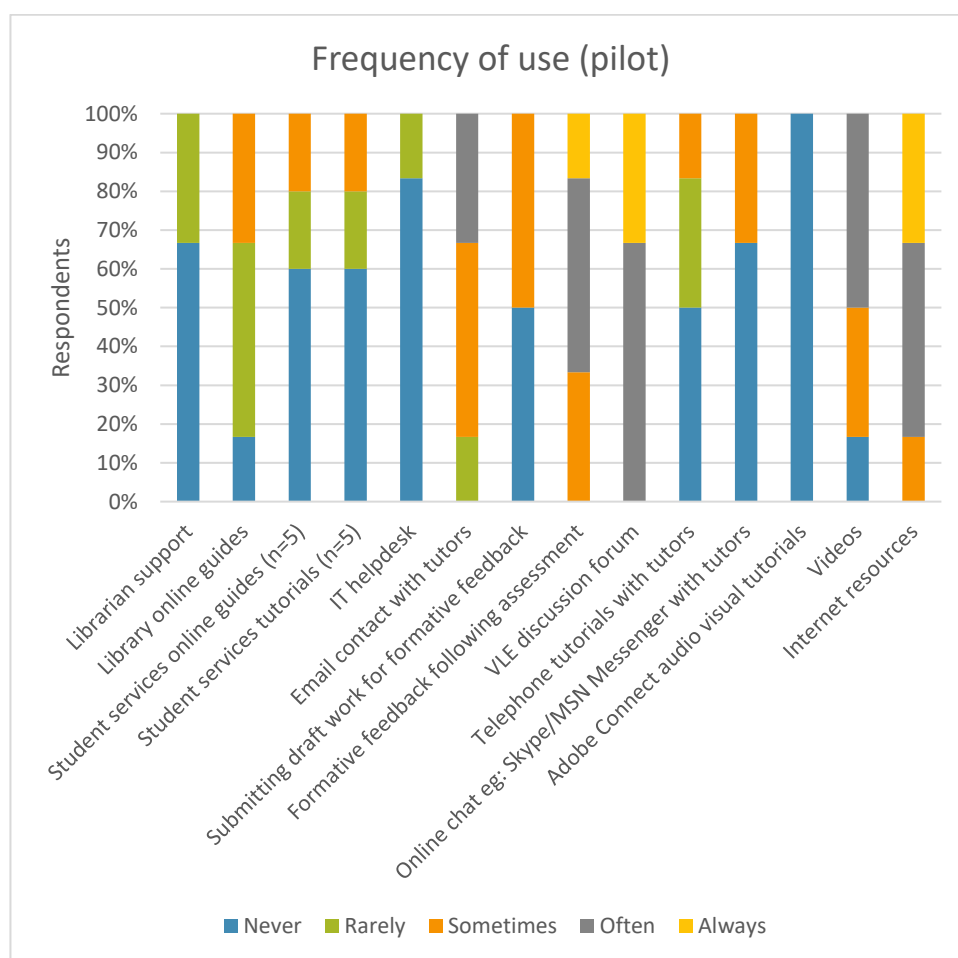


Figure 3.3.3iv: Frequency of academic skill development opportunity use (pilot)

v. Reasons why students use academic skill development opportunities

Participants were asked to choose from a list the reasons for using academic skill development opportunities to address research question 4⁴. Participants were able to select multiple responses to this question (*Figure 3.3.3v*). The number of respondents to each category are shown.

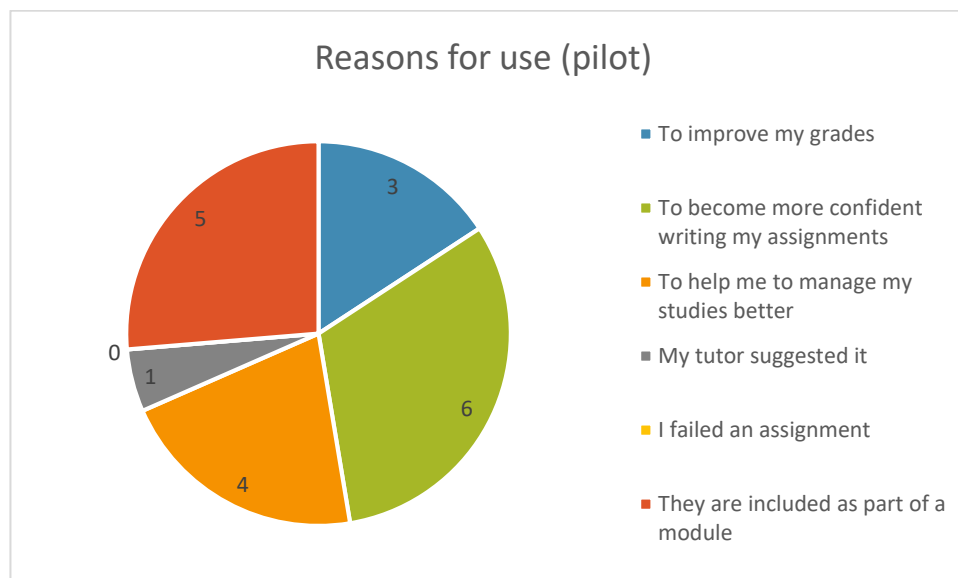


Figure 3.3.3v: Reasons why students use academic skill development opportunities (pilot)

All students cited 'to become more confident writing my assignments' as a reason for using the academic skill development opportunities available to them. This may again reflect the level of students' learning and their ability to work as self-directed learners. However, five students selected that 'they are included as part of a module', which does not necessarily contradict the assumption that students are self-directed learners, but it does represent the possibility of 'scaffolded' rather than 'bolt on' skill support which is appropriate to students' needs. No students within the pilot utilised academic skill development opportunities because they failed an assignment, although one student was recommended by a tutor to access skill development opportunities, but this does not appear to have been as a result of academic failure.

vi. Student satisfaction with academic skill development opportunities

Participants were asked to indicate, using a five point Likert scale, their level of satisfaction with the academic skill development opportunities to address research question 5⁵. The number of respondents for each category of question are indicated (*Figure 3.3.3vi*).

⁴ Research Question 4: Why do students access academic skill development opportunities?

⁵ Research Question 5: What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

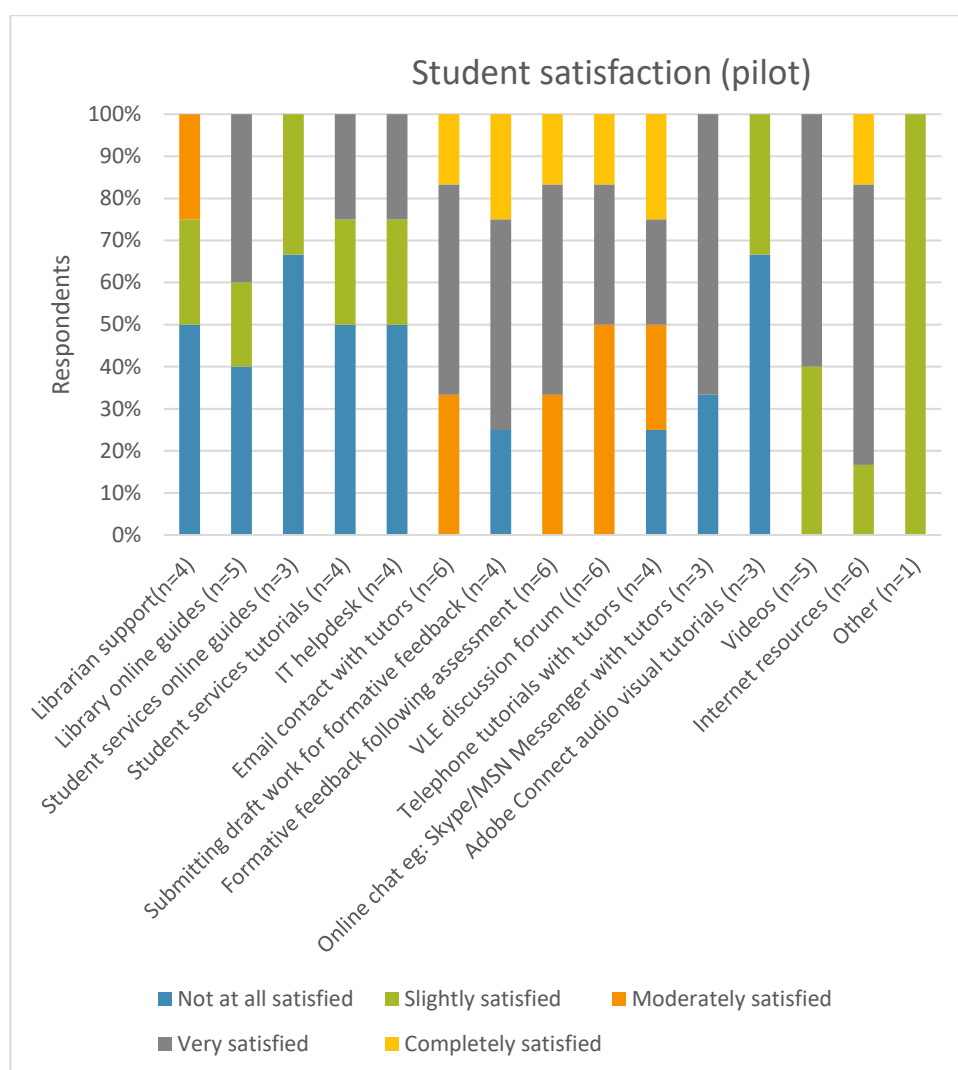


Figure 3.3.3vi: Student satisfaction with academic skill development opportunities (pilot)

In response to this question, two respondents were 'not at all satisfied' with librarian support, student services online guides, student services tutorials and the IT helpdesk. The library online guides drew mixed responses with two respondents who were 'not at all satisfied' and two who were 'very satisfied' with these resources. Email contact with tutors, feedback following assessment, videos and internet resources were a significant factor in contributing to students' satisfaction, with three respondents being 'very satisfied' with these academic skill development opportunities. Two students were 'not at all satisfied' with Adobe Connect tutorials, which, since they report these were not available, their dissatisfaction is potentially voicing that they would like this type of audio-visual interaction with their tutors.

vii. Contribution to students' academic development

The final question on the questionnaire asked participants to indicate, using a five point Likert scale, whether the academic skill development opportunities had contributed to their academic development. This addressed research question 5. The number of respondents for each category of question are indicated (*Figure 3.3.3vii*).

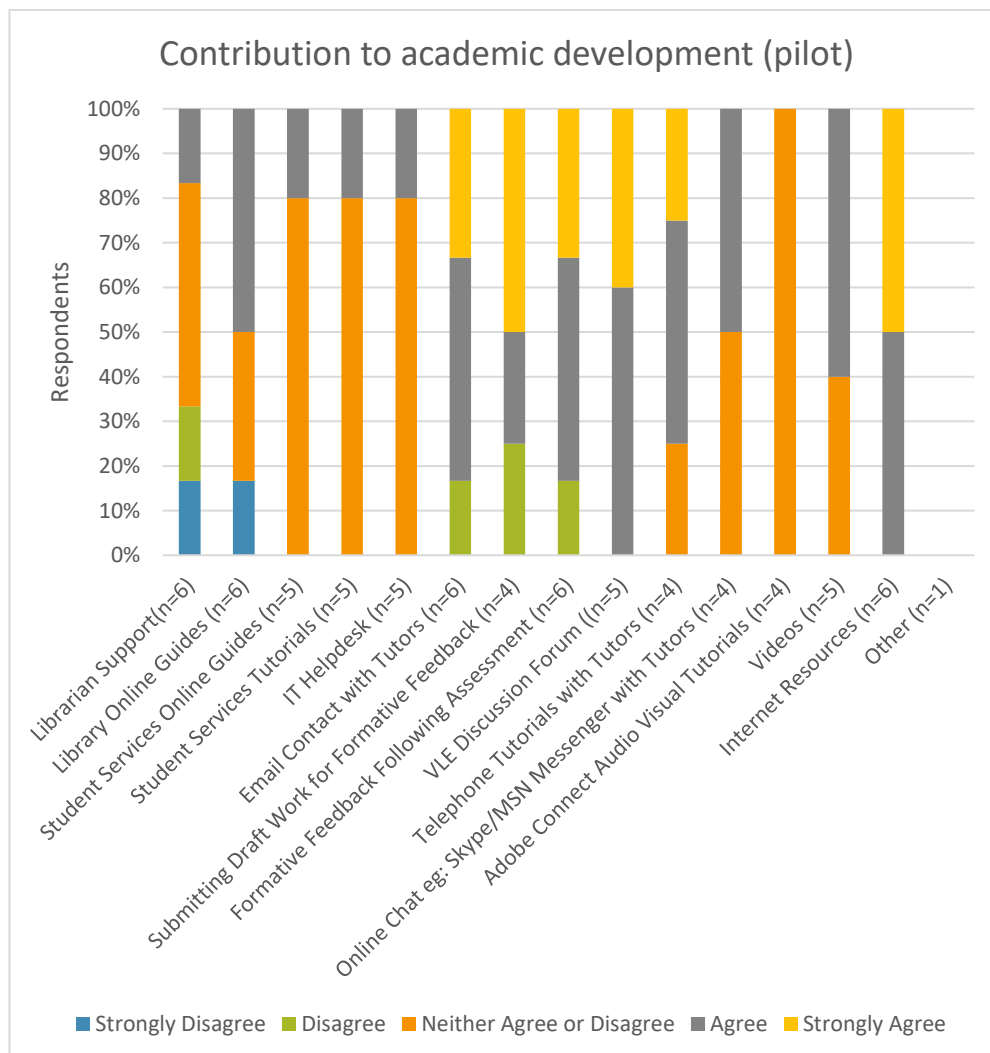


Figure 3.3.3vii: Contribution to students' academic development (pilot)

The pilot data suggest strong contribution to students' academic development from the VLE discussion forum and internet resources. Email contact with tutors, submitting draft work for formative feedback and formative feedback following assessment also feature strongly, although 1 student for each of these categories selected 'disagree'. On closer examination of the raw data the same student selected 'disagree' for email contact with tutors and submitting draft work for formative feedback, which may represent this student's dissatisfaction with a particular tutor, module or assignment. A second student selected 'disagree' for formative feedback following assessment which may represent a dissatisfaction with the content of the feedback whereby it was perceived to be unhelpful in enhancing their understanding or academic development.

Submitting draft work for formative feedback indicated a median and mode response of 'strongly agree', but it would appear that all opportunities involving interaction with tutors (or peers in the case of the VLE) are perceived as positive contributions to development of students' academic skills; a feature which will be discussed in chapter 6. In contrast, students seem to be rather ambivalent about the generic skill development opportunities provided by the university, particularly librarian support, student services online guides, student services tutorials and the IT helpdesk.

On completion of the pilot data analysis the decision was taken not to edit the online questionnaire for strand 1, with the exception of the one additional question identified earlier: enquiry about students' faculty. Although the number of respondents was small, the pilot online questionnaire helped establish the questionnaire as a reliable method of data collection for strand 1 and thus it contributes to answering the research questions. Statistical testing of the pilot questionnaire was not used to test its reliability, but use of the conceptual framework to underpin the development of questions and review of the questionnaire by experts ensured the accuracy of the questionnaire as a valid data collection tool (Heavey, 2015). The strand 1 results are presented in chapter 4, with a full discussion of the integrated QUAN and QUAL results and findings in chapter 6.

3.3.4 Strand 2: online, audio-visual, semi-structured interviews (QUAL)

Online, audio-visual, semi-structured interviews facilitated the gathering of rich data from geographically remote students which might not otherwise be feasible due to cost or location. Use of open questions during online semi-structured interviews with video was the primary mechanism for collecting rich data, providing opportunity for clarification of responses in strand 1 (Creswell, 2003) and utilising an exploratory approach to understand participants' perception (Bryman, 2012) of academic skill development opportunities. Participants were sent an email (*Appendix 8*), via their university email account, inviting them to participate. The email included a Participant Information Sheet specific to strand 2 (*Appendix 2*) and a Consent Form (*Appendix 3*). Informed consent is fundamental to research ethics and this was gained by participants completing the Consent Form and returning it by email before data collection began (Anglia Ruskin University, 2013). The Consent Form stated explicitly that the audio recording and transcript would be retained by the researcher only and their anonymity would be maintained when presenting the results of the study. The risk of coercion in gaining informed consent was greatly reduced by the lack of face to face contact during the consent phase. Mutually convenient appointments were made for the interviews once a participant's consent was received and this email dialogue helped establish a rapport with participants (Hesse-Biber and Griffin, 2013). The 'face to face' nature of

the online interview provided opportunity for reminding participants of the option to withdraw their consent at any stage, to remind them of the purposes of the research and to address any concerns they had about their anonymity and confidentiality of the data (Sue and Ritter, 2012).

The online, audio-visual, semi-structured interviews were hosted using Adobe Connect. This is a web conferencing software service which enables audio-visual interaction, either on a one to one basis or with multiple users. Its functionality allows not only for audio-visual dialogue between participants, but the ability for the host (tutor) to demonstrate from their desktop computer: such as reviewing a student's work during a tutorial, delivering presentations or providing navigational instruction for university IT systems. Personal experience with Adobe Connect has also included group tutorials, thereby allowing ODL students the opportunity to 'meet' their peers.

For the strand 2 interviews only the audio-visual aspects of Adobe Connect were used, providing opportunity for face to face interaction with interviewees. Time was initially scheduled for interviews between May 18th and June 5th, 2015 – five interviews were held during this period. In light of the low response from students, the deadline was extended until June 30th. Students who had failed to respond to the request to organise interviews were emailed to inform them of the extended deadline. This prompted one further response from a student who apologised for the delay in response, citing that they had not been checking their emails recently. A number of students were completing their final module and in hindsight other students may also have failed to check their student email accounts due to their proximity to completing their course.

There were no specific technological requirements to participate except a web camera to enable visual interactions. The ability for students to participate in an environment of their choice was advantageous in making them feel more relaxed (Holstein and Gubrium, 2011), whilst the online nature of the interview helped develop an understanding of the participants in their context as an online distance learning student (Sharpe and Benfield, 2012). Hesse-Biber and Griffin (2013) suggest visual interaction helps add a sense of humanity and verifies the credibility of the study, but had participants not owned web camera facilities, the interviews would have been hosted using audio alone.

The interview schedule (*Appendix 6*) was developed by directly relating it to research questions three, four and five⁶, as well as the QUAN results in strand 1, thus ensuring interaction occurred between the two methods (Creswell and Plano Clark, 2011). A matrix was also compiled (*Appendix 16*) which showed the relationship between individual interview questions and the respective research question, together with the relevant concepts from the conceptual framework, thus providing a visual overview of the required coverage of the research questions and conceptual framework via the interview schedule.

Possible responses to questions were anticipated and questions were also piloted with colleagues to determine whether the questions might work as intended (Maxwell, 2013). Critical review of the literature led to the inclusion of additional questions to establish if links existed between the literature and students' responses (*Table 3.3.4*).

Interview question	Rationale for question
1. Do you attend campus for any aspect of your course?	University records used to select the sample identified participants as 'Distance Learning'. However, variation in the nature of 'Distance Learning' within the university exists. This question sought to gain an understanding of whether interviewees attend campus for any aspect of their course to facilitate interpretation of interviewees' responses about their academic skill development opportunities.
2. What motivates you during your studies?	The literature identified motivation as a key attribute for online distance learning students. This question sought to establish students' motivation for studying their course, as well as strategies or resources they used to raise motivation levels during challenging periods of study.
3. Please explain what you understand by 'academic skills'.	On the strand 1 questionnaire students were asked to indicate (from a list) what they consider to be 'academic skills'. This led to variation in responses so this question sought clarification or confirmation of responses to strand 1 by asking interviewees to articulate their understanding of 'academic skills'.

6

3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

8. To what extent is the 'human' aspect of study skill support important to you?	The literature review identified tutors as an important determinant in the quality of students' higher education experience. This question sought to ascertain whether or not interviewees considered it important that the opportunities they utilised were facilitated by a person as opposed to being a text-based document, video or other type of reusable learning object.
11. Can you think of any other academic skill development opportunities which might improve the student experience for distance learning students?	The literature suggests most universities provide remedial support which is offered in extra-curricular skill centres and is facilitated by support staff as opposed to being course specific and delivered by tutors. Having gained an understanding during the interviews about students' perceptions of the quality of their academic skill development opportunities, this question sought students' opinions regarding what <i>they</i> think would facilitate students' development.

Table 3.3.4i: Rationale for additional interview questions

Conducting semi-structured interviews presented opportunities for asking more complex questions (Sue and Ritter, 2012) whilst allowing participants "to express their understanding in their own terms" (Patton, 2002, p.348). Participants' narratives were accurately captured by recording the interview, thus preventing inadvertent changes to the text or misinterpretation or phraseology (Patton, 2002) and including pauses, intonation of voice and laughter to facilitate data analysis and help reflect the interview process more fully (Sue and Ritter, 2012). Audio functionality within Adobe Connect was utilised, but secondary digital recordings were also made as a backup. Recording the interview did raise ethical considerations such as participants' anonymity and representation of sensitive data which might have been revealed. To minimise this, participants were not referred to by name throughout the interview. Each interviewee was identified at the start by a numeric code (eg: Interviewee 01) to facilitate anonymous transcription and analysis of data.

Interviews have a number of disadvantages including: the impact of time to conduct the interview, time required to analyse and interpret the data and the skill of the interviewer in eliciting open and honest responses (Oppenheim, 1992). Participants may be inhibited by the technology used to conduct the interviews (Sue and Ritter, 2012), but having used online web conferencing for student tutorials I was experienced in facilitating online conversations and had opportunity to guide or instruct the participants as necessary. Participants were emailed information (*Appendix 10*) to guide them in checking the set-up of their personal computer prior to the online interview, together

with the URL for the Adobe Connect interview. Participants were asked to login 5-10 minutes before the interview appointment to provide opportunity to establish microphone and web camera settings. At the start of each interview participants were reminded of their option to withdraw consent and reassured that their anonymity would be maintained.

There were two fairly significant challenges during the strand 2 data collection. Although the system had been tested prior to the interviews (using family members as 'students' to test the instructions inviting them to the Adobe Connect meeting room as well as testing the recording facilities), the first interview presented significant challenges in terms of quality of the recording. The interviewee's webcam was not directed on him, so he was not sitting in front of his computer and I perceived he may have been repeatedly moving away from the microphone. Reminders were provided during the interview, but unfortunately this meant the recording could not be transcribed, although repeated listening to the audio did enable some of his comments to be documented. A further challenge arose when attempting to upload the audio files for transcription by an external provider. The audio files recorded in Adobe Connect could not be read by the transcription company and the secondary 'WAV' files created via a personal digital recorder were too large to upload using home internet. This was overcome by playing the Adobe Connect audio and recording it using an MP3 file on the digital recorder. These MP3 files were successfully uploaded to the transcription provider. Each of these incidents were disappointing in light of the checks made beforehand, but both presented a significant personal learning opportunity.

3.4 Data analysis

This section identifies the methods used to analyse the data for this mixed methods study.

3.4.1 Strand 1 (QUAN)

Descriptive analysis was preceded by reviewing the data in Survey Monkey. Data were presented in Survey Monkey both as tables and histograms for all respondents, in addition to individual responses, all of which were downloaded to facilitate closer scrutiny. Analysis of data was made using a combination of Excel spread sheets and Statistical Program for the Social Sciences (SPSS). This facilitated the summarising of data and provided opportunity for the discovery of patterns and trends (Ivankova, 2013). Results are presented in chapter 4 as descriptive statistics in the form of charts and frequency tables. Inferential statistics are also utilised to explore any statistically

significant difference or relationship between two or more category variables using cross-tabulation chi-square and correlation tests, thereby promoting understanding and communication (Teddle and Tashakkori, 2009). Identical procedures were adopted during the pilot phase, with the exception that correlation techniques were not performed due to the small sample. Nonetheless, carrying out the descriptive statistical techniques with the small number of respondents to the pilot provided opportunity for personal learning and development in quantitative data analysis.

3.4.2 Strand 2 (QUAL)

Identification of trends and patterns following analysis of the QUAN data led to the development of categories and descriptors, based upon the conceptual framework, to steer the QUAL analysis. Qualitative data analysis was predominantly inductive (Patton, 2002) and utilised both manual techniques and NVivo. Interview transcripts were initially analysed manually using standard thematic analysis procedures to generate codes, themes and sub-themes in accordance with the conceptual framework. Braun and Clarke's (2006) framework for thematic analysis was utilised. This involved reading and re-reading transcripts and utilising different colour highlighter pens to colour code recurring patterns and themes that demonstrated a relationship to specific research questions. This led to refinement of the categories and descriptors of the conceptual framework and the development of a coding scheme (*Appendix 11*). A Coding Scheme Development Chart (*Appendix 15*) was developed to maintain a record of the changes made to the coding scheme at different stages of the analysis process. This chart was used as a working tool which became part of the audit trail to help establish the validity of the study (Bloomberg and Volpe, 2008).

Following the manual analysis process, the transcripts were uploaded into NVivo and coded using the coding scheme to define 'nodes'. In practice, the highlighted words or phrases from the manual process were not copied across into NVivo; instead the transcripts were read again and coded words or phrases were compared to the manual highlighting. Although this proved time-consuming, it did promote immersion in the data and opportunity for reflection where any discrepancies occurred in allocation of the coding. Once all transcripts had been coded, a series of summary tables were compiled, in line with the conceptual framework, with all interviewees' comments being grouped according to the coding scheme. An example is provided in *Appendix 18* showing interviewees' 'reasons for accessing skill support'. The aim of the summary tables was not to instil any form of quantification, but to facilitate analysis and synthesis of interviewees' responses by the respective codes.

The coding process fragmented the interview into separate categories, promoting opportunity to view the data in detail. However, coding sentences and phrases in NVivo did lead to the potential for losing the context and emotion behind interviewees' comments, therefore synthesis involved viewing these sections of texts in tandem with viewing the original transcripts to enable a holistic and integrated approach (Bloomberg and Volpe, 2008). QUAL data are presented in chapter 5 in the form of quotes to illustrate themes and multiple perspectives of participants (Creswell and Plano Clark, 2011).

3.4.3 Integration of QUAN and QUAL

The QUAL data set were determined by the results of the QUAN strand; thus a third stage of analysis occurred to consider how analysis of the QUAL data could build upon the QUAN findings (Teddlie and Tashakkori, 2009). Integrating the QUAN and QUAL data promoted the drawing of meta-inferences relating to whether the QUAL strand provided a better understanding of the research problem than the QUAN strand alone (Creswell and Plano Clark, 2011). The detail of this third level of analysis is discussed in chapter 6, together with the challenges faced and the steps taken for their management.

3.5 Reliability and validity of quantitative data and results

Test-retest reliability sought to increase stability of the QUAN method by administering a pilot phase of strand 1. Test-retest reliability makes the assumption that substantial changes were not made to the online questionnaire between both administrations (Punch, 2014). Following administration of the pilot phase there were no revisions to questions, although one additional question was added whereby respondents were asked to specify their faculty. On reflection, this was considered potentially useful data which might elicit faculty-specific areas of good practice worthy of influencing university policy or dissemination across the university. However, this question did highlight anomalies in the data which resulted from changes to the university faculty structure. From September 2014 the university was re-structured into five faculties (previously four): Arts, Law and Social Sciences (ALSS); Lord Ashcroft International Business School (LAIBS); Science and Technology (FST); Health, Social Care and Education (FHSCE) and Medical Science (FMS). FMS was a new Faculty in September 2014; prior to that the courses, students and staff were part of FHSCE. Analysis of the strand 1 data established that no students had selected 'FMS'. Closer inspection of the respondents' data who volunteered to participate in strand 2 revealed that three were studying FMS courses, although they had selected 'FHSCE' on their questionnaire. It

was impossible to establish whether further discrepancies existed with this specific question for other respondents, although this was not considered significant with regards answering the research questions. However, the implications of students' responses to this question are considered in chapter 4.

Content validity of the questionnaire was established by consultation with experts directly involved with supporting students in the development of their academic skills who were asked to judge if the questionnaire actually measured what it was intended to assess (Teddlie and Tashakkori, 2009). Claims of generalizability were not feasible because the sample may not totally represent the ODL student population (Muijs, 2011), although transferability is viable. The methods of statistical analysis and presentation of results were verified by a statistician to provide robustness to the study.

3.6 Trustworthiness and credibility of qualitative data and findings

Combining QUAN and QUAL methods sought to achieve 'completeness' in addressing the research questions (Bryman, 2012). Minimising personal or participant bias increased the trustworthiness of the qualitative data. Although verification of the interpretations of the data can be an important strategy in determining credibility of the interpretations, this has potential for participants to change their responses (Teddlie and Tashakkori, 2009) or withdraw their data. The decision was therefore taken not to utilise verification by participants, based on the constructivist premise that individual interpretations of the data would also inherently introduce variation. Audio recordings created within Adobe Connect and the digital sound recorder were downloaded, encrypted and stored anonymously on a personal laptop, providing opportunity for verification against the transcription; thus participant verification was not sought.

Strategies employed throughout the sequential QUAN → QUAL design ensured the integrated conclusions were credible, namely: application of a systematic procedure for selecting participants for the QUAL strand, using the QUAL strand to clarify unexpected results in the QUAN strand and, being mindful when integrating QUAN and QUAL data (Ivankova, 2013).

3.7 Ethical considerations

The ethical considerations associated with this research study have been incorporated into the different elements of the research design, thus this section serves to summarise the key issues.

Educational research carries with it ethical issues due to the need for collecting data from or about people. Punch (2014) separates the literature on ethical issues relating to research into two types: codes of ethical and professional conduct such as the University Research Ethics Policy (Anglia Ruskin University, 2014) and the British Educational Research Association (BERA) guidelines (2011), as well as publications from researchers who identify and discuss ethical considerations specific to their areas of research. Ethics approval was granted from the Department Research Ethics Panel (DREP) before commencement of data collection (Anglia Ruskin University, 2014). All participants were informed via email about the study. Participants' consent for strand 1 was implied via their response to the questionnaire. Participants who indicated their willingness to participate in strand 2 were required to submit written consent via email prior to the online interview. Participants were able to withdraw from the study until submission of the questionnaire or transcription of the interview, at which point anonymisation of the data occurred thus it could not be withdrawn. Electronic raw data including questionnaire responses, recordings and transcripts were encoded, password protected and stored on a personal laptop requiring personal login. Audio recordings made within Adobe Connect were deleted following encrypted storage on the personal laptop.

Ethical issues associated with insider research included potential conflict between my role as researcher and an academic within the institution (Trowler, 2011). Power and coercion remained an important ethical consideration throughout both strands. Mechanisms to administer each strand helped reduce this, as well as personal awareness during online interviews in strand 2.

3.8 Chapter summary

In summary, this chapter has provided a detailed description of this study's research methodology. A mixed methods approach was employed to explore academic skill development opportunities available to ODL students at the HEI at which I work, and students' perception of the contribution these opportunities make to their academic development and in meeting their needs and expectations. Participants in the sample for strand 1 (QUAN) (n=522) and the pilot of strand 1 (n=26) were purposively selected, via inclusion and exclusion criteria, from students studying distance learning courses at Anglia Ruskin University. Respondents to both the pilot (n=6) and strand 1 (n=43) volunteered to participate in strand 2 (QUAL) (n=5). Two data collection methods were utilised: an online questionnaire (QUAN) and online, audio-visual, semi-structured interviews (QUAL). The pilot data informed the strand 1 questionnaire and strand 2 interview schedule and were, therefore, influential upon the research design. For this

reason the pilot results were presented in this chapter. The pilot data were reviewed against literature, thus enabling review of the conceptual framework, as well as interpretation of emergent themes. The reliability and validity of the quantitative data and pilot results have been considered, together with the trustworthiness and credibility of the qualitative data and findings. Limitations of the study have also been outlined.

A review of the literature revealed very little knowledge and explanatory theory about the academic skill development opportunities favoured by ODL students and their perception of the effectiveness of these opportunities in meeting their personal needs and expectations. The intent was that this study would make an original contribution to the knowledge base of academic skill development for ODL students. Additionally, it is hoped this study will inform ODL teaching, learning and support strategies within the university, thereby enhancing the ODL student experience.

The next chapter presents the results from the strand 1 QUAN data.

Chapter 4 Strand 1 results from online questionnaires

This research study aims to explore whether academic skill development opportunities provided by the HEI in which I am employed make a positive contribution to online distance learning (ODL) students' academic development. In the previous methodology chapter the data collection methods for this research study were critically discussed. The pilot results and key findings were included, together with the implications of those findings and the changes made to the online questionnaire as a consequence of utilising the pilot to test the questionnaire as a data collection tool. The online questionnaire was used to gain an understanding of the academic skill development opportunities available to ODL students at the HEI at which I work, and students' perception of the contribution these opportunities make to their academic development and in meeting their needs and expectations. In this chapter, the results of the strand 1 (QUAN) element of this research study will be presented and analysed, with the strand 2 (QUAL) data following in chapter 5. Integration of the pilot and strand 2 data will also occur in this chapter to highlight similarities or differences in the data.

A prime ethical consideration for this research study has been the maintenance of anonymity of participants. Therefore all participants will be identified, if necessary, via a pseudonym as follows:

- Respondents to the strand 1 questionnaire will be identified as 'Respondent' and a number between 1 and 43 eg: Respondent 1 (R1). The respondent referred to in section 3.3.1 (chapter 3) who completed the online questionnaire twice will be identified by two numbers - R9/R29. It is not possible to establish with any certainty if this is the only duplicated response, but the data have been reviewed based on the assumption that no other duplication exists.
- There were 3 incomplete responses to the strand 1 questionnaire which are included in the results. These will be identified as 'Respondent Incomplete' and a number eg: Respondent Incomplete 6 (RI6).

4.1 Presentation and analysis of the QUAN data

Strand 1 data were collected via an online questionnaire using Survey Monkey.

Following application of the eligibility criteria and exclusion of students who were intermitting, responses were sought from 522 students. The three week deadline for completion of the online questionnaire elicited a response of 2.9% (n=15). Attempts were made to increase the response rate by sending further email requests to participants (section 3.3.1 in chapter 3) and extending the completion deadline by two weeks. A further extension to the deadline was considered, but dismissed, in part to

avoid excessive emails which might have been perceived by students as intrusive or making additional demands on their time, but also to avoid any impact on the collection of the strand 2 data. The final response rate to the questionnaire was low (8%, n=43), but responses were received from students studying with all faculties and across the academic levels within the inclusion criteria.

Results are shown in the order by which questions were asked on the online questionnaire since these were designed to address the research questions⁷. By presenting the results in this manner, answers to the research questions will begin to emerge and the students' voice will remain at the heart of the analysis. Results are presented as descriptive statistics in the form of charts and frequency tables, as well as inferential statistics using the cross-tabulation chi-square test. The descriptive statistics outline baseline results for the study, providing background and context for the inferential statistics which aim to confirm or disconfirm relationships or correlations between variables and testing of hypotheses. Descriptive and inferential statistics are presented together with the relevant online questionnaire question under discussion, as opposed to separate sections of the chapter, thus enabling rigorous analysis of key concepts and findings as they emerge from responses to the online questionnaire. These key findings will be revisited in chapter 6 when conclusions based on all the data are discussed.

Responses to questions 5 and 6 on the online questionnaire (*Appendix 4*) were measured as nominal data and provided answers to research questions 1 and 2. Although research questions 3, 4 and 5 were qualitatively driven, numeric data were collected via the online questionnaire. This took the form of nominal data to address research question 4 (question 8 on the online questionnaire), and ordinal data to measure students' satisfaction with the academic skill development opportunities they had used and their perception of the contribution these had made to their academic development (questions 9 and 10 on the online questionnaire). The frequency of students' use of academic skill development opportunities was measured via the collection of ordinal data (question 7 on the online questionnaire). This indirectly relates to research question 3, which seeks to establish when students access the different

⁷ Research Questions

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

academic skill development opportunities available to them, data primarily collected via the online, audio-visual, semi-structured interviews.

4.2 Statistical tests

All statistical tests with the non-parametric data collected via the online questionnaire were undertaken using a combination of Statistical Program for the Social Sciences (SPSS) and Excel spread sheets. In all tests, no assumptions were made about the population, as is customary with non-parametric data (Cohen, Manion and Morrison, 2011). Descriptive statistics in the form of frequencies facilitated the organisation and reporting of the data and enabled observation of the profile of the data, but no inferences or predications were made as a result of these descriptive statistics. Following this descriptive statistical analysis, a second stage of analysis looked for patterns, relationships or connections in the data (Denscombe, 2012). Observations are in effect a hypothesis, which can be defined as “a tentative explanation that accounts for a set of facts and can be tested by further investigation” (Muijs, 2011, p.7). In order to test a hypothesis, a null hypothesis (H_0) was created which stated there was no difference or association between variables which was any greater or less than would be expected by chance (Heavey, 2015), and each null hypothesis is identified in this chapter as the analysis progresses.

Presenting a hypothesis in its null form places the burden on the researcher *not* to confirm that null hypothesis (Cohen, Manion and Morrison, 2011). As a researcher, greater interest lies in trying to establish whether a relationship *does* exist between variables and, therefore, attempt is conventionally made to reject the null hypothesis. Cohen, Manion and Morrison (2011) contend that ‘rejection’ of a null hypothesis is too absolute a term; claiming the strict parameters of research make it unlikely that rejection will be applicable in all cases. They argue for an alternative use of language, that of a null hypothesis being ‘supported’ or ‘not supported’; these are the terms used to present inferential statistics in this study. A second type of hypothesis, the alternative hypothesis (H_A), states that a relationship between variables *does* exist; therefore, the results in this chapter identify the alternative hypothesis when the null hypothesis is not supported.

An essential aspect of hypothesis testing is to establish the strength of any relationship between the variables. As such, it is essential to calculate the significance level, or probability value (p -value), since this provides an indication of the likelihood that an association between the variables exists. Statistical significance relates to the level of confidence that can be associated with the findings not merely being the product of chance, but does not automatically imply a level of importance in the findings. In the

social sciences the convention is to apply a significance level of $p < 0.05$, the interpretation of this being that no pattern or relationship is worthy of consideration unless the probability of them occurring by chance is less than 5% (Denscombe, 2012). Therefore, only patterns or relationships within this study which appeared to be statistically significant ($p < 0.05$) led to a null hypothesis being not supported.

4.3 Chi-square test

Where interesting findings began to emerge from descriptive statistical analysis, hypothesis testing using the chi-square test (X^2) provided opportunity to make inferences and predictions based on the data gathered. The chi-square test is a flexible and commonly used statistical test which can be used with non-parametric nominal and ordinal data. The test measures the difference between the observed value and a statistically generated expected value (based upon the null hypothesis). Chi-square is a test of difference using univariate analysis and between two or more categorical variables. Chi-square values are calculated via a cross-tabulation table, with the independent variable in the columns and dependent variable in the rows (Muijs, 2011). When using a 2 by 2 table in SPSS, a Yates' Correction for Continuity is applied in the computed calculation which is designed to compensate for an overestimate of the chi-square value with a 2 by 2 table (Pallant, 2010). There are limitations to the chi-square test and these relate to the data in individual cells in the cross-tabulation table, namely: no cell should have an expected value of less than 1 and, no more than 20% of the cells should have expected value of less than 5.

The chi-square test introduces the notion of degrees of freedom (df) which refers to "the number of values that are free to vary when certain restrictions are placed on the data" (Blaikie, 2003, p.190). The number of degrees of freedom is related to the number of cells in a contingency table and in a chi-square test the degrees of freedom are equal to the number rows minus one times the number of columns minus one. Thus for a 2 by 2 contingency table:

$$df = (2-1) \times (2-1)$$

$$df = 1 \times 1 = 1$$

In view of the small data set within this study, these issues did occur on occasions, in which case the chi-square test was performed manually instead of using SPSS. These manual calculations required the extraction of the relevant data from SPSS and transferring it to a manual cross-tabulation table. Whilst this extraction of the data did introduce potential for error, this was minimised by rigorous checking. On a positive note, however, manual calculation of the chi-square test provided opportunity for

personal development by gaining a thorough understanding of the mathematical and statistical procedures which underpin the test.

4.4 The participants

Responses were received from students studying across the range of levels of course included within the sample (*Figure 4.1*), providing opportunity to gain an understanding about academic skill development from students with diverse entry requirements and educational experiences.

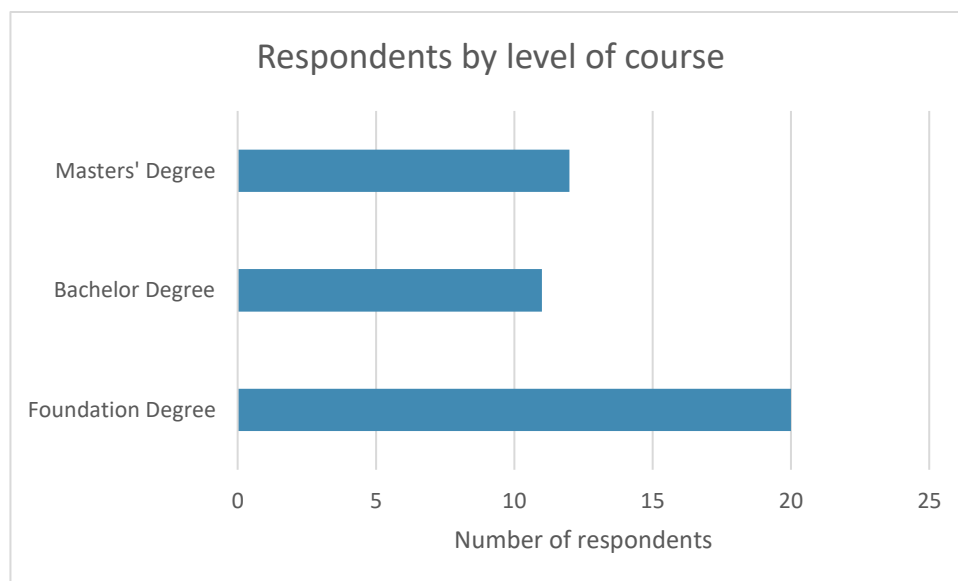


Figure 4.1: Respondents by level of course

Of the total number of respondents ($n=43$) most courses were delivered by FST⁸ (37.2%, $n=16$) or LAIBS (32.6%, $n=14$) (*Figure 4.2*). ALSS was only represented by one student response, but only one ALSS course (with 12 registered students) was included within the sample, possibly indicative of the low number of ODL courses delivered by that faculty. Interestingly, no students selected 'FMS', although closer inspection of the respondents' data who volunteered to participate in strand 2 revealed that three were studying FMS courses, even though they selected 'FHSCE' on their questionnaire. This raises the question about how the change in structure of the faculties was communicated to students, or whether students are perhaps not interested in this level of detail and consequently had forgotten about their change in faculty name. Potentially of greater concern is the response from R30 who indicated

⁸ Faculty Names and Acronyms:

LAIBS – Lord Ashcroft International Business School

ALSS – Arts, Law and Social Sciences

FMS – Faculty of Medical Science

FHSCE – Faculty of Health, Social Care and Education

FST – Faculty of Science and Technology

they 'Don't Know' the name of their faculty. Again, this may relate to the change in faculty structure and R30 did not know the name of their new faculty or was unsure which faculty they belong to. Alternatively this may highlight issues of ODL students not belonging (or not feeling they belong) to the university community.

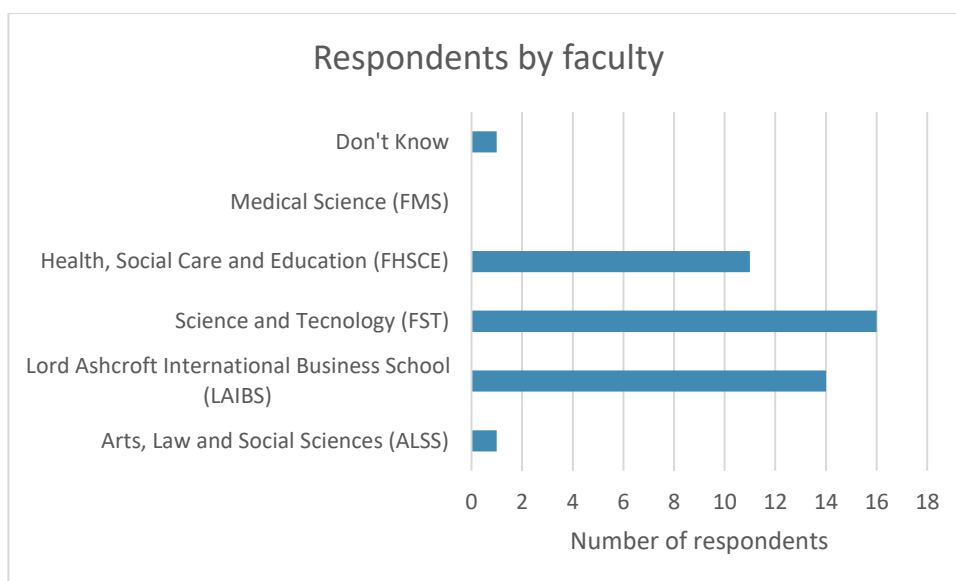


Figure 4.2: Respondents by faculty

Further clarification of the participants was gained using cross-tabulation in SPSS to assess the distribution of participants by faculty and the level of course being studied (*Figure 4.3*). Foundation Degree students represented the highest number of respondents (47%, n=20), with an even number of respondents studying a Bachelor Degree (26%, n=11) or Masters' Degree (28%, n=12). Foundation Degree courses delivered by FST were represented by the highest number of respondents (60%, n=16), although this is likely to be indicative of the largest number of students studying FST courses within the inclusion criteria (n=249 on one Foundation Degree).

Q2: Which faculty delivers your course * Q1: Which level of course are you studying?

Cross-tabulation

Count

Q2: Which faculty delivers your course	Q1: Which level of course are you studying?			Total
	Foundation Degree	Bachelor Degree	Masters' Degree	
Arts, Law and Social Sciences	0	0	1	1
Lord Ashcroft International Business School	3	9	2	14
Science and Technology	12	0	4	16
Health, Social Care and Education	4	2	5	11
Don't Know	1	0	0	1
Total	20	11	12	43

Figure 4.3: Distribution of participants by faculty and level of study

Although distance learning courses are considered a 'part time' mode of study, some ODL courses at the university at which I am employed are offered on a full time (study load) basis, meaning students can study a maximum of 120 credits per year in accordance with full time campus-based students. This ensures further choice and flexibility for students in being able to select a study load which aligns with their personal circumstances. Responses from the strand 1 data indicated 90.7% (n=39) of respondents were studying on a part time basis. This is perhaps unsurprising since many students opting for ODL as a mode of study are in employment, either studying for continuous professional development (CPD) purposes, or employment in a specific sector is an entry requirement for a work-based course. The pilot questionnaire did not include a question to identify students' faculty. However, the pilot sample were invited from a LAIBS Masters' level course and, since all LAIBS respondents to strand 1 indicated 'part time' study, it might be reasonable to infer the pilot respondents (n=6) also studied on a part time basis.

4.5 Students' definition of academic skills

Critical review of the literature in chapter 2 failed to find an explicit definition of academic skills, therefore the student voice was sought via Q4 on the questionnaire to ascertain how students define academic skills. Students were provided with a list of

academic skills from which to choose. This list was compiled in part from skills referred to in the literature, as well as the categories of support offered by the university. When asked what they consider to be 'academic skills', respondents voiced a range of opinions (*Figure 4.4*).

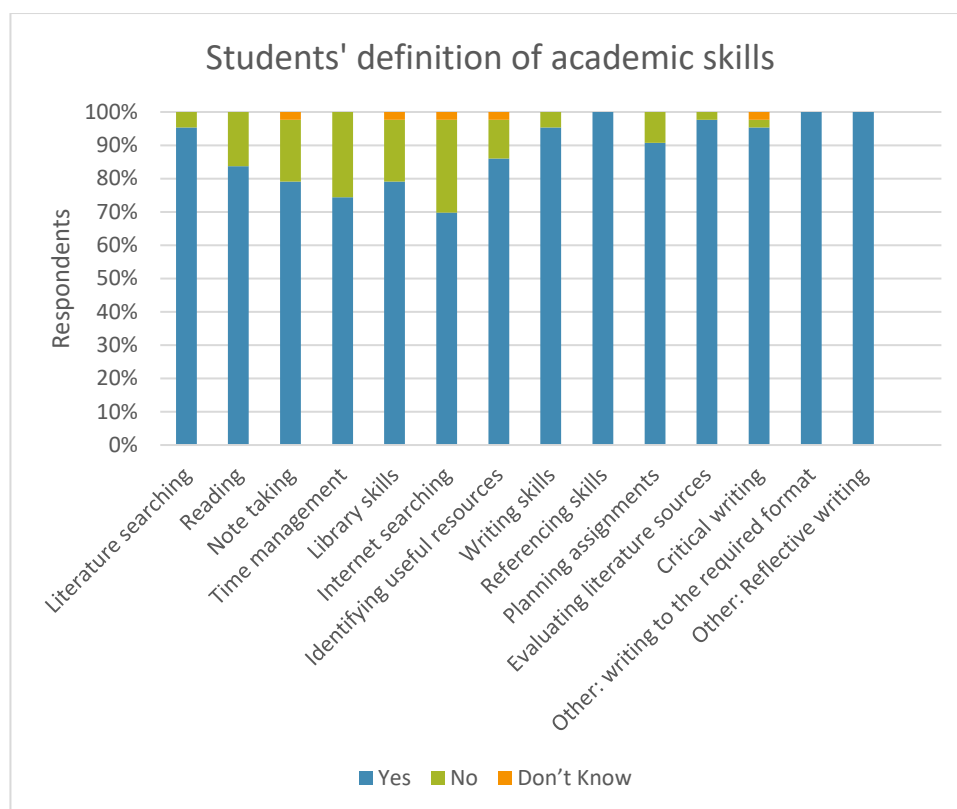


Figure 4.4: Students' definition of academic skills

'Referencing skills' were considered by 100% of students to be an academic skill, the only 'skill' to receive total agreement. 'Time management', often considered to be a specific skill required for distance learning study (Dearnley, 2003), was thought to be an academic skill by 74.4% (n=32) of respondents, with one respondent indicating 'don't know'. This mixed response reflects responses to the pilot where only 33.3% (n=2) of students considered time management to be an academic skill. Since the 'no' responses in strand 1 represented 25.6% (n=11) of responses, this was considered worthy of further investigation in light of the significance placed on time management by the literature. A cross-tabulation table (*Figure 4.5*) was compiled using SPSS to measure the responses for 'time management' against level of course to establish if respondents' views varied with level of study. Exploration of these results showed that 85.0% (n=17) of Foundation Degree students and 83.3% (n=10) of Masters' Degree students viewed time management as an academic skill. In contrast, only 45.5% (n=5) of Bachelor Degree students shared this opinion.

Q4d: What do you consider to be academic skills? - Time management * Q1: Which level of course are you studying? Cross-tabulation

Count		Q1: Which level of course are you studying?			Total
Q4d: What do you consider to be academic skills? - Time management		Foundation Degree	Bachelor Degree	Masters' Degree	
Yes		17	5	10	32
No		3	6	2	11
Total		20	11	12	43

Figure 4.5: Students' definition of time management as an academic skill by level of study

Taking into consideration the distribution of students across the levels of study, the number of 'no' responses for the Bachelor Degree responses are somewhat surprising, but since it was impossible to interpret any meaning from this descriptive statistical result, attempt was made to apply the chi-square test to assess if this represented a statistically significant result. A cross-tabulation table and chi-square test were initially computed via SPSS. However, the small data set for time management as an academic skill resulted in one of the conditions of the chi-square test being violated since 33% of the cells showed an expected value of less than 5. Consideration was given to performing a manual chi-square test and to group levels of study into the categories of 'undergraduate' or 'postgraduate'. The justification for this grouping was twofold, namely: the inclusion criteria of selecting students in their second year of study meant that both Foundation and Bachelor Degree students were potentially studying at Level 5, but importantly to eradicate one of the cells with a result of less than 5. Although this grouping would only have provided opportunity to make inferences about the general categories of undergraduate and postgraduate, 25% of the cells in the 2 by 2 table remained less than 5 (n=2) and it thus became impossible to perform further analysis with regard to respondents' opinion of time management as an academic skill.

Internet searching scored highly as a 'no' response, with 27.9% (n=12) of respondents not viewing this as an academic skill. Further exploration of these data against students' level of study showed that 30.0% (n=6) of Foundation Degree students and 45.5% (n=5) of Bachelor Degree students did not view internet searching as an academic skill. By comparison, only 8.3% (n=1) of Masters' Degree students did not view internet searching as an academic skill. Although the chi-square test could not be performed due to the small data set on one cell of the 2 by 2 table, this result will be discussed further in section 4.7 which analyses the academic skill development opportunities used by students.

From a tutor perspective some of the other 'no' responses for students' definition of academic skills were also interesting, with several students not viewing reading, note taking and library skills as academic skills. Two respondents provided suggestions for other academic skills: 'writing to the required format' (R9) and 'reflective writing' (R11). R9 was studying a Bachelor level course with LAIBS and R11 a Masters' level degree with FHSCE. Although it is impossible to draw any robust conclusions from these two responses, they may be indicative of faculty or course specific requirements for assignments. If so, then this supports the literature which suggests study skill support should be contextualised to course content and thus, provided by academics as opposed to non-academic support staff in generic learning centres. Further inferential statistical testing was not possible due to the small data set for some variables and therefore no significant conclusions can be drawn about how students define academic skills.

Overall it would appear students hold mixed views about the skills they consider to be 'academic skills'. One explanation for these mixed responses might be that the skills required by students are in fact diverse and dependent, to some extent, on students' pre-existing skills as they embark on higher education learning. Alternatively, their mixed responses may be indicative that students did not understand the term 'academic skills' and, if so, this is a limitation of the study. For this reason, clarification was sought at the start of the strand 2 interviews.

4.6 Academic skill development opportunities available to students

Participants were asked about the academic skill development opportunities available to them to address research question 1⁹. Not all strand 1 participants responded fully to all categories of this question, thus the total number of respondents for each category are shown (*Figure 4.6*).

⁹ Research Question 1: What academic skill development opportunities are available to ODL students?

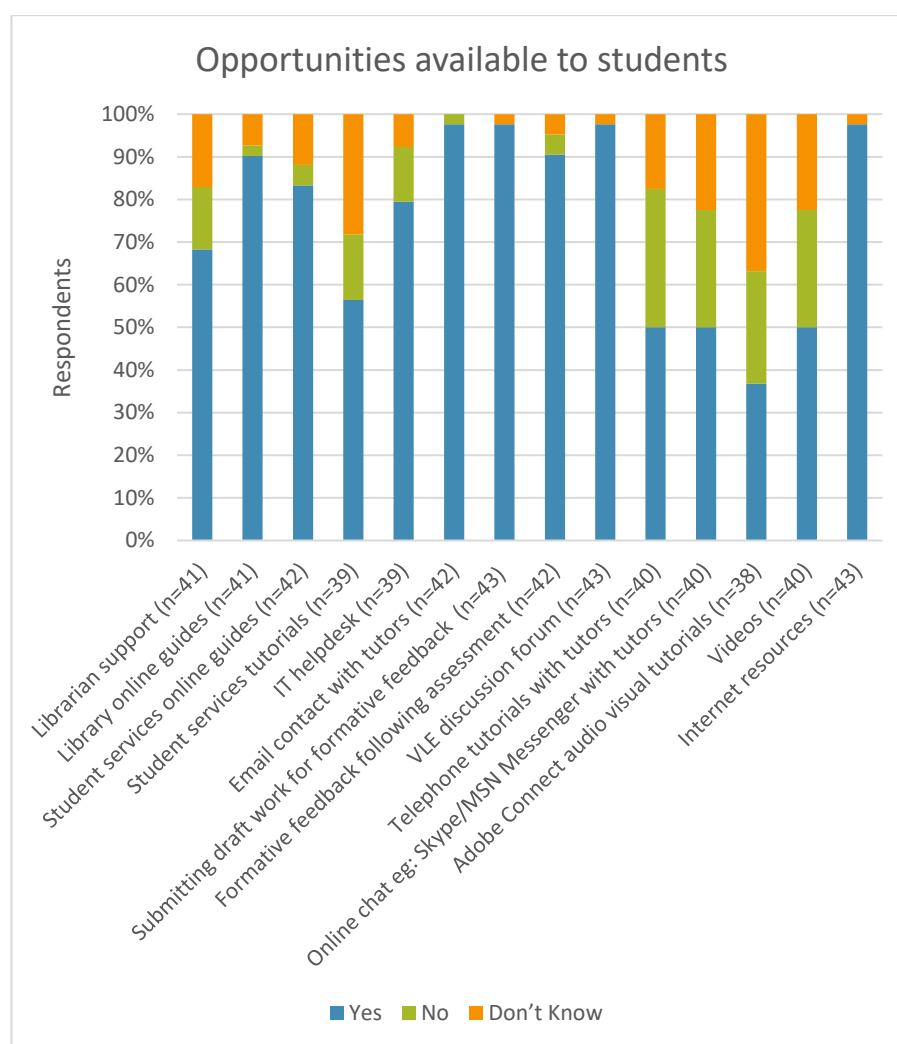


Figure 4.6: Academic skill development opportunities available to students

In terms of generic university support, 68.3% (n=28) of respondents selected 'yes' to the availability of librarian support and 56.4% (n=22) to student services tutorials, responses which show similarity to the pilot. In contrast, awareness of the availability of the library online guides (90.2%, n=37) and student services online guides (83.3%, n=35) was much higher. Email contact with tutors (97.6%, n=41), submitting draft work for formative feedback (97.7%, n=42) and the VLE discussion forum (97.7%, n=42) featured highly as opportunities known to be available for academic skill development. Results for 'internet resources' showed this to be another essential source of support, with 97.7% (n=42) of students being aware of the availability of academic skill development opportunities via the internet.

Perhaps of greater concern is the number of students who 'don't know' whether or not services are available to them. For example, 28.2% (n=11) of respondents 'don't know' whether student services tutorials are available and 36.8% (n=14) of respondents 'don't know' if Adobe Connect tutorials are offered. When the negative ('no' and 'don't know') responses are grouped together, results showed that 50% of respondents reported

telephone tutorials (n=20), online chat tutorials (n=20) and videos (n=20) were either not available or they 'don't know' of their availability, with 63% (n=24) of respondents recording a negative response about Adobe Connect tutorials. These results show similarities with those of the pilot where 50% (n=3) of respondents recorded negative responses about the availability of telephone and online chat tutorials. These collective results may be indicative of the methods used to communicate to students about the availability of various academic skill development opportunities. If this is the case, it is disappointing that methods which have the potential to facilitate interpersonal contact for ODL students are not being fully utilised.

Results showed the academic skill development opportunities listed on the questionnaire to be available across all faculties, with the exception of librarian support and student services tutorials which the ALSS respondent recorded as 'don't know'. Since there was only one respondent represented by ALSS it is difficult to make any robust interpretation, although the 'expected' results calculated from cross-tabulation within SPSS showed a positive response for this faculty for both librarian support and student services tutorials. Students' awareness of the availability of asynchronous academic skill development opportunities were consistently positive, including: library and student services online guides, email contact with tutors, submitting draft work for formative feedback, formative feedback following assessment, VLE discussion forum and internet resources. By comparison, results for all synchronous academic skill development opportunities involving interaction with tutors or support staff were largely negative with, in some cases, more than 50% of respondents recording either 'no' or 'don't know' responses. This was particularly noticeable for telephone tutorials and online chat in FST, with 80% (n=12) and 79% (n=11) of respondents respectively recording 'no' or 'don't know' for the availability of these opportunities. It is difficult to decipher whether these results are indicative of ineffective methods of communicating the availability of academic skill opportunities to students, or alternatively that ODL students' expectations for synchronous support with tutors or support staff do not align with what is available. The specific availability of telephone tutorials is unknown, although module guides provide tutor contact details, including a telephone number. Since this information is available to students, one explanation for the negative responses might be that telephone tutorials are not explicitly offered by tutors, thus students do not perceive them to be available. Alternatively, the lack of availability may be indicative of logistical issues associated with students' location, such as living in different time zones or infrequent and unreliable telephone communication.

This cross faculty comparison indicates ODL students have a variety of academic skill development opportunities available to them, irrespective of their faculty of study.

4.7 Academic skill development opportunities used by students

Participants were asked to identify the academic skill development opportunities they used to address research question 2¹⁰. Not all participants responded fully to this question, thus the total number of respondents for each category are shown (*Figure 4.7*).

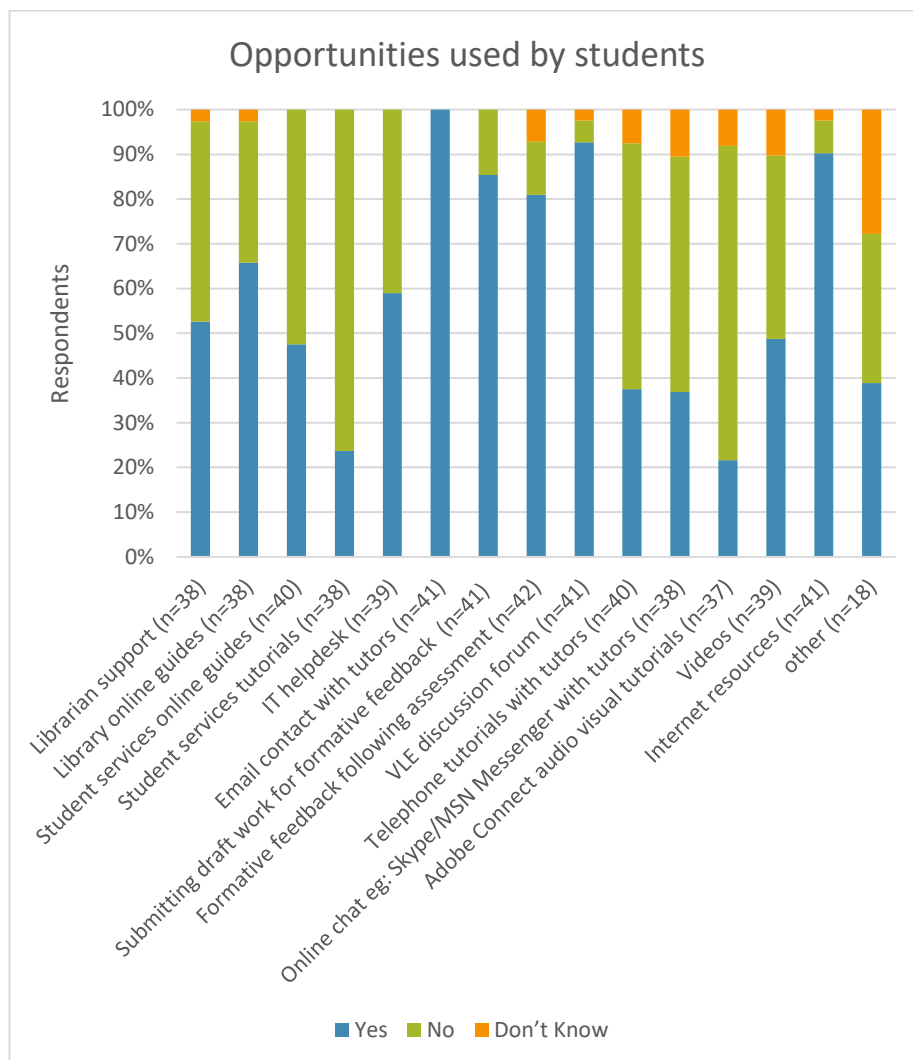


Figure 4.7: Academic skill development opportunities used by students

Email contact with tutors as an opportunity for academic skill development was used by 100% (n=41) of respondents. Other opportunities involving some sort of dialogue or interaction were also well used, such as the VLE discussion forum and the feedback mechanisms. Internet resources were used by 90% (n=37) of students who responded to this question, which is considerably higher than those accessing generic university skill support opportunities. This seems to indicate students are more likely to search the internet in preference to making use of the text-based guides, presentations and videos available via the university website. A cross-tabulation table (*Appendix 17*)

¹⁰ Research Question 2: What academic skill development opportunities do students use?

enabled exploration of students' use of internet resources by level of study. The justification for this was to explore whether Masters' level students are more self-directed in searching for online academic skill development opportunities outside of the university VLE. Results showed that 100% of the Masters' level students (n=11) used internet resources as an academic skill development opportunity. However, undergraduate students represented the greatest proportion of respondents (63.5%, n=26), with 41.5% (n=17) of students studying a Foundation Degree. Whilst it may be reasonable to expect Masters' level students to be self-directed and sufficiently skilled in sourcing reliable internet resources, the same cannot be assumed about Foundation Degree students. Although it is impossible to draw any significant conclusions from this level of statistical analysis, it is nonetheless an important finding which will be discussed further in chapter 6.

Figure 4.7 shows that a number of academic skill development opportunities drew 'don't know' responses. The justification for including 'don't know' as a potential response was in recognition that respondents may not be able to recall their use of an academic skill development opportunity, perhaps due to the timeframe between their use of the opportunity and completion of the questionnaire. It is impossible to draw any conclusions from these results, but the 'don't know' responses may be an indication that those academic skill development opportunities made little impact on some respondents and, as a result, they could not remember its usage at the time of completing the questionnaire.

Further cross-tabulation tables were created to assess students' use of academic skill development opportunities by faculty. The justification for this measurement was to explore if students' decisions to use specific academic skill development opportunities might be dependent upon their faculty of study. There was no evidence to suggest this occurred. The only noticeable difference was the significant number of students in FST who did not use telephone tutorials (71.4%, n=10) (*Figure 4.8*). This is an interesting observation but it is impossible to draw any conclusions, although in response to question five, 80% (n=12) of FST students responded negatively ('no' or 'don't know') about the availability of telephone tutorials. If telephone tutorials are not available, this may be because tutors do not perceive a need, for example if attendance on campus provides opportunities for interactions between students and tutors. Unfortunately this cannot be verified, although one strand 2 interviewee studying with FST confirmed her distance learning course requires attendance on campus two days per semester. If this practice is routine across the faculty, this may account for 80% of the FST students recording telephone tutorials are not available.

Q6j: Which of these academic skill development opportunities have you made use of? - Telephone tutorials with tutors * Q2: Which faculty delivers your course? Cross-tabulation

Count

Q6j: Which of these academic skill development opportunities have you made use of? - Telephone tutorials with tutors	Q2: Which faculty delivers your course					Total
	ALSS	LAIBS	FST	FHSCE	Don't Know	
Yes	0	8	3	4	0	15
No	1	5	10	5	1	22
Not available	0	1	1	1	0	3
Total	1	14	14	10	1	40

Figure 4.8: Students' use of telephone tutorials by faculty

Having established baseline results for the academic skill development opportunities available to students and the opportunities they used, the results of these tests were compared (*Table 4.1*).

Academic skill development opportunities	Available (Used)		
	Yes	No	Don't know
Librarian support	28 (20)	6 (17)	7 (1)
Library online guides	37 (25)	1 (12)	3 (1)
Student services online guides	35 (19)	2 (21)	5 (0)
Student services tutorials	22 (9)	6 (29)	11 (0)
IT helpdesk	31 (23)	5 (16)	3 (0)
Email contact with tutors	41 (41)	1 (0)	0 (0)
Submitting draft work for formative feedback	42 (35)	0 (6)	1 (0)
Formative feedback following assessment	38 (34)	2 (5)	2 (3)
VLE discussion forum	42 (38)	0 (2)	1 (1)
Telephone tutorials with tutors	20 (15)	13 (22)	7 (3)
Online chat eg: Skype/MSN Messenger with tutors	20 (14)	11 (20)	9 (4)
Adobe Connect audio visual tutorials	14 (8)	10 (26)	14 (3)
Videos	20 (19)	11 (16)	9 (4)
Internet resources	42 (37)	0 (3)	1 (1)

Table 4.1: Comparison between availability and students' use of academic skill development opportunities

Noticeable differences were observed between the availability of the generic academic skill development opportunities provided by the university and students' use of them. 52.6% (n=20) of respondents used librarian support and closer inspection of the data within SPSS revealed that 85% (n=17) of these were studying at undergraduate level. This is perhaps indicative of the need for inexperienced students to gain skills in using the library and developing skills with referencing. Although 44.7% (n=17) of respondents did not use librarian support, this number in itself is largely the grouped

negative responses to the availability of librarian support, the implication being that a significant proportion of ODL students do not perceive librarian support to be available to them. This may be an important finding from a university perspective, suggesting a need to either develop librarian support for ODL students if it is not already available, or to ensure the availability and nature of the service is conveyed more effectively to this group of students. The most striking differences in *Table 4.1* are seen between the availability and use of student services online guides and student services tutorials. Even though students reported these opportunities as being available to them, 52.5% (n=21) have not used the student services online guides and 76.3% (n=29) have not used student services tutorials. It is difficult to deduce whether these discrepancies are a manifestation of students exerting personal choice in the academic skill development opportunities they use, or if students are explicitly steered towards specific opportunities by tutors or implicitly via various information systems utilised by the university to promote academic skill development. However, this does align with the results from the QUAL online, audio-visual, semi-structured interviews which revealed that accessibility of the university online generic materials is problematic for students who find the online guides laborious to 'plough through' and not always meeting their needs; thus students actively choose to find information from other sources. From a university perspective this is a significant finding, particularly when compared to the 90.2% (n=37) of students who chose to use internet resources for academic skill development.

As a result of this descriptive statistical analysis, patterns and themes began to emerge in the academic skill development opportunities used by students. These themes were in two broad areas, namely:

- students use opportunities which are personalised rather than generic
- students use opportunities involving one to one interaction as opposed to those with no interaction or group interactions.

Prior to commencing any inferential statistical testing, academic skill development opportunities listed on the online questionnaire were grouped into categories of 'generic', 'personal', 'no interaction', 'one to one interaction' (with a tutor or member of the support staff) or 'group interaction' (*Table 4.2*).

Academic skill development opportunities	Type of academic skill development opportunity		Type of interaction		
	Generic	Personal	No interaction	One to one interaction	Group interaction
Librarian support		x		x	
Library online guides	x		x		
Student services online guides	x		x		
Student services tutorials	x				x
IT helpdesk	x	x	x	x	
Email contact with tutors		x		x	
Submitting draft work for formative feedback		x		x	
Formative feedback following assessment		x		x	
VLE discussion forum		x			x
Telephone tutorials with tutors		x		x	
Online chat eg: Skype/MSN Messenger with tutors		x		x	
Adobe Connect audio visual tutorials		x			x
Videos	x		x		
Internet resources	x		x		

Table 4.2: Academic skill development opportunities by group

When assigning academic skill development opportunities to the generic and personal groups it became apparent the IT helpdesk potentially falls into both groups.

Exploration of the IT helpdesk website revealed that resources are primarily generic in nature, but there is also opportunity for students to make an appointment to meet with a technologist on campus for problems with hardware. This is clearly a personal level of service, although not available for students who are geographically remote from the university. Consideration was given for excluding the IT helpdesk from the group and further statistical testing on the basis of whether this type of support could be considered as an academic skill development opportunity, but IT resources via the website indicated the availability of a wide range of support, some of which have the potential to facilitate students' academic skills. On the basis of this the IT helpdesk was included in both the 'generic' and 'personal' grouping. Duplication of grouping also occurred when considering the types of interaction experienced by the different academic skill development opportunities. These included online chat with tutors and Adobe Connect tutorials, both of which could be facilitated on a one to one basis or for group tutorials. Rather than assigning these to both groups, the decision was taken to assign online chat with tutors to the 'one to one' group and Adobe Connect tutorials to the 'group interactions'. The justification for this decision was largely based upon personal experience and best practice for both systems.

Exploration of students' use of 'generic' or 'personal' academic skill development opportunities began with the creation of the following null hypothesis:

H₀: There is no statistically significant difference between students' use of generic or personal academic skill development opportunities.

A manual chi-square test was performed with a 2 by 2 cross-tabulation table (Table 4.3).

	Type of academic skill development opportunity		
	Generic	Personal	Total
Yes	132 (144.37)	228 (215.62)	360
No	97 (84.62)	114 (126.38)	211
Total	229	342	571

Table 4.3: Cross-tabulation table showing students' use of generic or personal academic skill development opportunities

Observed and expected frequencies (in parenthesis) are shown. Expected values for each cell were calculated using the formula:

$$\text{Expected value of a cell} = \frac{\text{row total} \times \text{column total}}{\text{Overall total}}$$

The chi-square test was performed using the formula:

$$X^2 = \sum \frac{(O-E)^2}{E}$$

The Yates' Correction for Continuity was applied which compensates for an over-estimate of the chi-square value when a 2 by 2 table is used (Pallant, 2010). In this manual calculation the Yates' correction required the subtraction of 0.5 from the numerical difference between the observed and expected frequencies. Thus the formula for calculating the chi-square value was:

$$X^2 = \sum \frac{(|O-E| - 0.5)^2}{E}$$

$$X^2 = \frac{(|132-144.37| - 0.5)^2}{144.37} + \frac{(|228-215.62| - 0.5)^2}{215.62} + \frac{(|97-84.62| - 0.5)^2}{84.62} + \frac{(|114-126.38| - 0.5)^2}{126.38}$$

$$X^2 = 4.78$$

The chi-square value is 4.78 with 1 degree of freedom (df). The level of statistical significance for this result with one degree of freedom was looked up in a table of critical values for chi-square distributions. This revealed the chi-square value was higher than the figure of 3.84 required for statistical significance at the 0.05 level. Therefore, when the chi-square statistic was calculated for students' use of generic or personal academic skill development opportunities, a statistically significant difference was found ($X^2 = 4.78$, d.f. = 1, $p = 0.05$), hence the null hypothesis was not supported.

This means the proportion of students using academic skill development opportunities which are personalised to them is significantly different to those who use generic opportunities provided by the university or obtained via the internet. From a university perspective this is a significant finding which will be discussed further in chapter 6.

A second chi-square test was performed to explore students' use of opportunities involving one to one interaction with tutors or support staff as opposed to those with no interaction or group interactions. Prior to the test the number of 'yes' and 'no' responses to each type of interaction were collated (*Table 4.4*). This showed that academic skill development opportunities involving one to one interactions with tutors or support staff were used by 50.6% (n=182) of students and those involving no interaction were used by 34.2% (n=123).

	Type of interaction			
	No interaction	One to one interaction	Group interaction	Total
Yes	123	182	55	360
No	68	86	57	211

Table 4.4: Cross-tabulation table showing the type of interaction with the academic skill development opportunities used by students

In order to explore whether students' use of academic skill development opportunities involving one to one interactions was significant, the following null hypothesis was created:

H₀: There is no statistically significant difference between students' use of one to one academic skill development opportunities or those with no interaction or group interactions.

Separate cross-tabulation tables were created to measure 'one to one' interaction against 'no interaction' (*Table 4.5a*) and 'one to one interaction' against 'group interaction' (*Table 4.5b*) and a manual chi-square test was performed for each table using the Yates' correction.

	Type of interaction		
	No interaction	One to one interaction	Total
Yes	123 (126.92)	182 (178.08)	305
No	68 (64.08)	86 (89.92)	154
	191	268	459

Table 4.5a: Cross-tabulation table showing no interaction against one to one interaction

The chi-square value for *Table 4.5a* is 0.49 with 1 degree of freedom (df). The level of statistical significance for this result with one degree of freedom was looked up in a table of critical values for chi-square distributions. This revealed the chi-square value was smaller than the figure of 3.84 required for statistical significance at the 0.05 level. Therefore, when the chi-square statistic was calculated for students' use of academic

skill development opportunities with no interaction against one to one interaction, a statistically significant difference was not found ($X^2 = 0.49$, d.f. = 1, $p = 0.05$), hence the null hypothesis was supported. This means the proportion of students using academic skill development opportunities where there is one to one interaction with a tutor or support staff was not significantly different to those who use opportunities with no interaction.

	Type of interaction		
	Group interaction	One to one interaction	Total
Yes	55 (69.85)	182 (167.15)	237
No	57 (42.15)	86 (100.85)	143
	112	268	380

Table 4.5b: Cross-tabulation table showing group interaction against one to one interaction

The chi-square value for *Table 4.5b* is 11.83 with 1 degree of freedom (df). This chi-square value is larger than the figure of 3.84 required for statistical significance at the 0.05 level and also larger than 6.63 at the 0.01 level. The observed use of academic skill development opportunities where there is one to one interaction, within these data set, differs significantly from the expected use when compared to students' use of opportunities with group interaction. The conclusion can be drawn that students' use of academic skill development opportunities where there is one to one interaction with a tutor or support staff rather than opportunities with group interaction is not simply a chance difference. This result is significant ($X^2 = 11.83$, d.f. = 1, $p = 0.05$), hence the null hypothesis was not supported, indicating ODL students prefer academic skill development opportunities which utilise one to one interaction in comparison to opportunities where there is group interaction. From a university perspective this is a significant finding with potential resource implications and will be discussed further in chapter 6.

4.8 Frequency of academic skill development opportunity use by students

Participants were asked to indicate, using a five point Likert scale, the frequency with which they accessed the academic skill development opportunities available to them. *Figure 4.7* showed significant numbers of students did not use a variety of academic skill development opportunities, including generic university skill support opportunities, telephone tutorials, online chat and Adobe Connect tutorials. In view of the potential for skewing the data, consideration was given to the exclusion of these 'no' responses when analysing the frequency of students' access to academic skill development opportunities. However, when scrutinising the raw data, anomalies were evident between students' 'no' responses to their use of academic skill development

opportunities and 'never' in terms of the frequency of use. For example, 44.7% (n=17) of respondents indicated they did not use librarian support, whereas 48.8% (n=20) respondents reported 'never' having accessed librarian support. This and other similar discrepancies in responses were perhaps indicative of slight differences in wording between questions which led to slightly different answers, thus highlighting a flaw in the use of questionnaires and a potential limitation in the study. Having considered the implications for the study, a pragmatic decision was made for transparency in the data and therefore all responses were retained when considering students' frequency of use. Not all strand 1 participants responded to each category, thus the total number of respondents for each category are indicated (*Figure 4.9*).

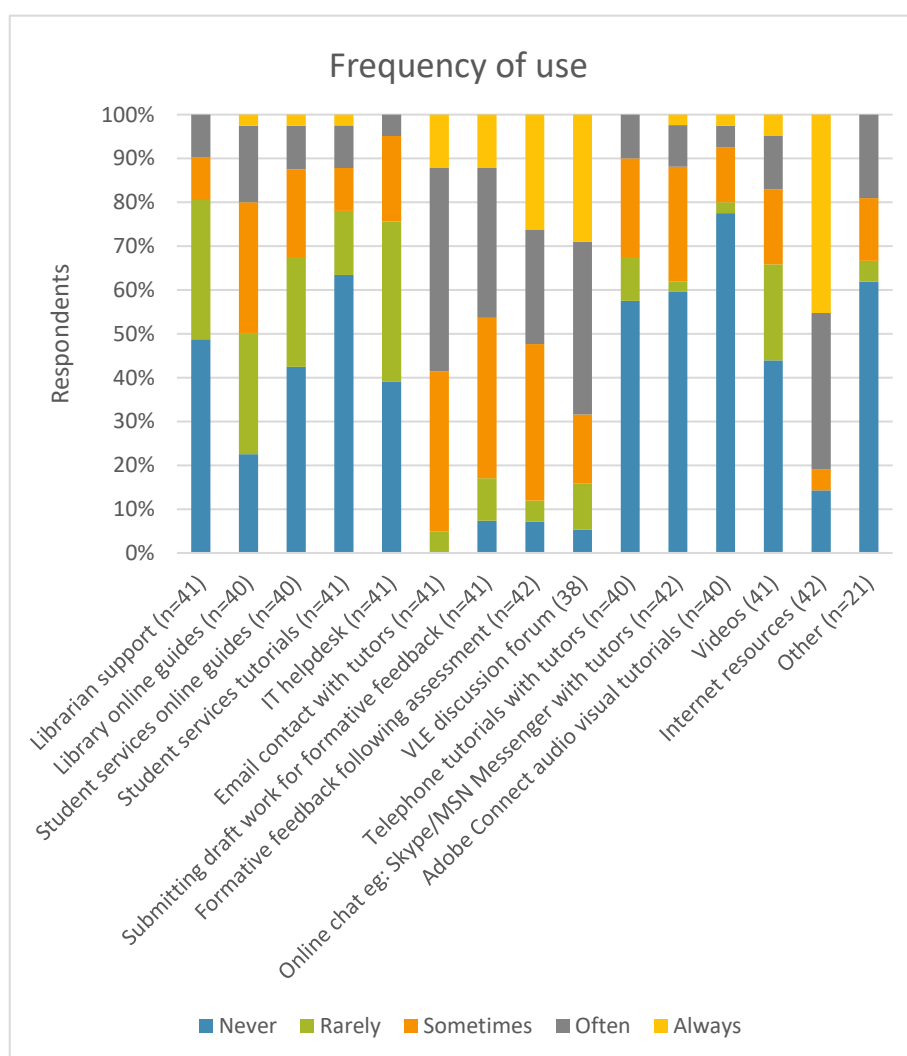


Figure 4.9: Frequency of academic skill development opportunity use

Results showed frequency of access to librarian support was inconsistent. In addition to the 48.8% (n=20) of respondents previously referred to who 'never' accessed librarian support, 31.7% (n=13) of respondents 'rarely' accessed librarian support. By comparison, 9.8% (n=4) of respondents 'sometimes' or 'often' accessed librarian support. This is a surprising result considering 68.3% (n=28) of respondents indicated

that librarian support was available to them and 52.6% (n=20) of respondents used librarian support. The university library is a huge physical and digital resource which appears to not be fully utilised by ODL students, based on this data set, and will be discussed further in chapter 6.

A similar pattern was seen for frequency of access to student services tutorials, with both median and mode responses (*Appendix 12*) indicating students 'never' accessed this academic skill development opportunity. Although 56.4% (n=22) of respondents indicated student services tutorials were available (*Table 4.1*), 63.4% (n=26) of respondents 'never' accessed student services tutorials, with only 9.8% (n=4) of respondents 'sometimes' or 'often' accessing these tutorials (*Appendix 12*). Interestingly, one respondent (R34) indicated they 'always' used student services tutorials. Closer inspection of their responses revealed a higher frequency in their use of generic academic skill development opportunities compared to the opportunities for personal interaction with academic staff. Although R34 'often' used email contact with tutors, other opportunities such as submitting draft work for formative feedback, formative feedback following assessment and the VLE discussion forum were only used 'sometimes'. Telephone tutorials and opportunities for conversation with academic staff were 'never' used because they were unavailable. R34's frequent use of student services tutorials may be because they were geographically close to a university campus. Geographic location is a factor which will be discussed further in chapter 6.

Email contact with tutors was 'often' used by 46% (n=19) and 'sometimes' used by 36.6% (n=15) of respondents to this question, with median and mode responses of 'often'. This and other opportunities for personal one to one interactions were reported earlier as being of statistical significance compared to those academic skill development opportunities offering generic group interactions. However, the VLE discussion forum was 'often' (38.8%, n=15) and 'always' used by 28.9% (n=11) of respondents to this question. A cross-tabulation table was created in SPSS to establish if a pattern existed in the frequency of use of the VLE discussion forum across faculties (*Figure 4.10*). It is clear that the VLE discussion forum is used across all faculties, but it is impossible to deduce the nature of its use. The data for FST would seem to indicate the VLE discussion forum is not used for formative activities since 14.3% (n=2) of students 'never' or 'rarely' used the VLE for academic skill development opportunities. However, faculty wide use of the VLE discussion forum for academic skill development opportunities does not appear to exist based on this data set, a feature which will be discussed in chapter 6.

Q7i: How frequently have you used these academic skill development opportunities? - VLE discussion forum * Q2: Which faculty delivers your course? Cross-tabulation

Count

Q7i: How frequently have you used these academic skill development opportunities? - VLE discussion forum	Q2: Which faculty delivers your course					Total
	ALSS	LAIBS	FST	FSHCE	Don't Know	
Never	0	0	2	0	0	2
Rarely	0	0	2	1	1	4
Sometimes	0	1	3	2	0	6
Often	0	7	6	2	0	15
Always	1	4	1	5	0	11
Total	1	12	14	10	1	38

Figure 4.10: Frequency of use of the VLE discussion forum by faculty

Feedback mechanisms were also frequently used opportunities for academic skill development. Submitting draft work for formative feedback was used 'sometimes' (36.6%, n=15) or 'often' (34.1%, n=14) by respondents. Since the submission of draft work has the potential to provide a robust opportunity for enhancing students' academic skills (Jacobs, Winnard and Elliott, 2014), it is somewhat disappointing that more than 12.2% (n=5) of respondents did not 'always' utilise this opportunity. It is impossible to decipher whether students made a conscious decision not to submit draft work for formative feedback or whether mechanisms were not in place within their course. Whilst the application of academic regulations does place restrictions on the volume of work that can be reviewed by academic staff, formative feedback on draft work provides diverse benefits for ODL students which also impact on the institution. This issue will be discussed in chapter 6.

Formative feedback following assessment showed a median response that students 'often' utilised this as an opportunity for academic skill development. However, the discrete data showed 35.7% (n=15) of respondents 'sometimes' used formative feedback following assessment, with only 26.2% (n=11) of respondents 'often' or 'always' using this opportunity. Whilst all students who submit work for assessment receive feedback, variation in the style and standard of feedback is likely to exist between academic staff. Even where good practice in providing formative feedback exists, students' academic and personal development is dependent upon them reflecting upon the feedback or seeking clarification from academic staff if they do not understand how it might be applied to future assignments (Wingate, 2010). This aligns with the results from the QUAL online, audio-visual, semi-structured interviews where one interviewee explained the impact of formative feedback following assessment in

which her referencing skills had been described as “poor”. Whilst this had a negative impact initially on the student in terms of her feeling “very stupid”, it did prove to be a key motivator in her proactively seeking support via a generic student services tutorial. It has to be acknowledged, however, that another student might not have turned this negative comment into a positive learning opportunity. Feedback following assessment is a key opportunity for providing students with formative comments to facilitate their academic and personal development, but it is essential that academic staff apply good practice so as to avoid a negative impact on students. This will be discussed further in chapter 6.

4.9 Reasons why students use academic skill development opportunities

Participants were asked to choose from a list the reasons for using academic skill development opportunities to address research question 4¹¹. Participants were able to select multiple responses to this question (*Figure 4.11*) and thus results are only presented as the number of respondents and not as a percentage.

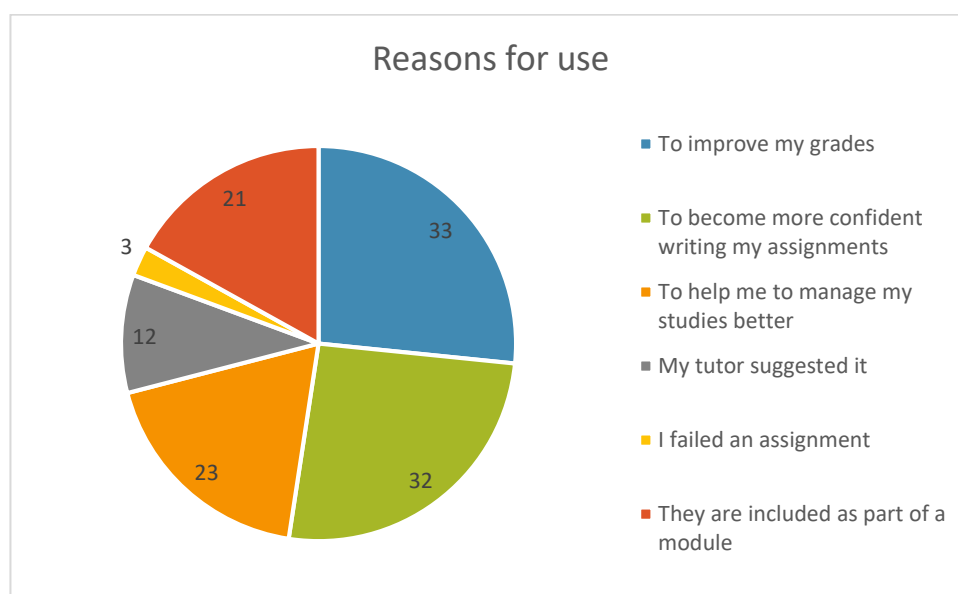


Figure 4.11: Reasons why students use academic skill development opportunities

Two reasons proved to be most prevalent: ‘to improve my grades’ (n=33) and ‘to become more confident in writing my assignments’ (n=32). This seems to reflect students’ aspirations for success in their studies, with two respondents providing ‘other’ reasons for using academic skill development opportunities: ‘to develop myself and increase knowledge’ (R11) and ‘to become more skilled’ (R13). Only 3 respondents used academic development opportunities because they had failed an assignment.

¹¹ Research Question 4: Why do students access academic skill development opportunities?

Twelve respondents used academic skill development opportunities because 'my tutor suggested it'. Chapter 2 referred to the negative impact which can be experienced by students when tutors refer them to skill support services (Wall, 2006; Simpson, 2008) and, although it has to be acknowledged that referral does not always imply the need for remedial action, personal experience suggests this is the predominant reason tutors direct students to support services. Of the 12 students who gave 'my tutor suggested it' as one of their reasons for accessing academic skill development opportunities, R18 also recorded they had failed an assignment. Closer inspection of the raw data revealed that overall R18 was very satisfied the academic skill development opportunities they had used had met their needs and, most importantly, reported an overwhelming positive response that these opportunities had contributed to their academic development. All 12 students, in fact, reported a largely positive experience. The concept of students being directed to skill support services has many facets which impact not only on the student but also the institution and, thus, will be discussed further in chapter 6.

Interestingly, 21 respondents utilised the academic skill development opportunities available to them because 'they are included as part of a module'. When viewing responses across each faculty (*Table 4.6*), results showed that academic skill development opportunities were included in modules across all faculties, including ALSS which was represented by only one student. This an encouraging result since the embedding of academic skills within curricula is identified as good practice within the literature, although it is important to note the response to this question was only represented by 48.8% of respondents. This might, therefore, represent students not recognising information in modules as academic skill development opportunities and thus this finding will be discussed further in chapter 6.

Reasons students use academic skill development opportunities	Faculty					Total
	ALSS	LAIBS	FST	FHSCE	Don't know	
To improve my grades	1	9	14	9	1	34
To become more confident writing my assignments	1	10	12	7	1	31
To help me to manage my studies better	1	6	11	6	0	24
My tutor suggested it	0	3	6	2	1	12
I failed an assignment	0	1	1	1	0	3
They are included as part of a module	1	6	6	7	1	21

Table 4.6: Reasons for students' use of academic skill development opportunities by faculty

A cross-tabulation table was compiled to show students' use of academic skill development opportunities by level of study (*Table 4.7*). This showed that 47.1% (n=16) of students who used academic skill development opportunities to improve their grades were studying at Foundation level, which represents 84.2% of the Foundation Degree students. 83.3% of Masters' level students also indicated their reason for using academic skill development opportunities was to improve their grades. Foundation Degree students represented the highest proportion of respondents in all categories except 'I failed an assignment'.

Reasons students use academic skill development opportunities	Students' level of study			
	Foundation Degree	Bachelor Degree	Masters' Degree	Total
To improve my grades	16	8	10	34
To become more confident writing my assignments	14	10	7	31
To help me to manage my studies better	12	4	8	24
My tutor suggested it	7	3	2	12
I failed an assignment	1	2	0	3
They are included as part of a module	8	6	7	21

Table 4.7: Students' use of academic skill development opportunities by level of study

Closer inspection of the reasons offered to students on the questionnaire revealed these could be categorised into two groups: 'personal development' (PD) and 'tutor initiated' (TI). However, it became clear that the reason of 'I failed an assignment' could either be tutor initiated or a student proactively seeking support to facilitate their personal development. Thus three groups emerged and a cross-tabulation table was produced with these groups mapped against the levels of interaction identified previously (*Table 4.8*). The rationale for this table was to explore if students used specific academic skill development opportunities for particular reasons. What became most evident was that personal development appeared to be the most significant reason for students accessing academic skill development opportunities. This is encouraging and may be indicative of the requirement for ODL students to be self-directed, independent learners (Ludwig-Hardman and Dunlap, 2003). There is a necessity for tutors to facilitate students' development of these skills, but this is only evident for internet resources and VLE discussions in *Table 4.8*. Email contact with tutors was the most frequently used academic skill development opportunity. This one to one interaction with tutors provides students with a very personal level of service, although from a university perspective it might be considered as resource intensive. VLE discussions were a key personal development opportunity; although with 48.8% (n=21) of students indicating these are part of a module, if these discussions are linked

to assessment, this may represent tutors facilitating students' personal development rather than students proactively seeking opportunities to develop their skills .

Level of interaction	Why did you use these opportunities? Which opportunities have you made use of?	Reasons students use academic skill development opportunities					
		Personal development (PD)			PD/TI	Tutor initiated (TI)	
		a. To improve my grades	b. To become more confident writing my assignments	c. To help me manage my studies better	e. I failed an assignment	d. My tutor suggested it	f. They are included as part of a module
No interaction	Library online guides	21	21	15	3	8	14
	Student services online guides	17	16	11	3	5	11
	Videos	15	16	10	3	4	12
	Internet	28	26	22	3	10	21
One to one interaction	Librarian support	15	17	11	3	6	11
	IT helpdesk	19	16	13	3	10	14
	email contact with tutors	33	30	23	3	12	20
	Submitting draft work for formative feedback	29	28	20	3	11	17
	Formative feedback following assessment	29	26	18	3	9	19
	Telephone tutorials with tutors	12	13	5	2	2	8
Group interaction	Online chat eg: Skype	11	12	7	2	2	9
	Student services tutorials	9	9	5	1	3	5
	VLE discussion forum	30	29	22	3	11	21
	Adobe Connect tutorials	6	6	4	1	2	6

Table 4.8: Students' choice of academic skill development opportunity and reasons for use

4.10 Student satisfaction with academic skill development opportunities

Participants were asked to indicate, using a five point Likert scale, their level of satisfaction with the academic skill development opportunities to address research question 5¹². Although this research question was qualitatively driven, numeric data were collected via the online questionnaire to gain an initial perception of students' satisfaction with the academic skill development opportunities they had used. Use of the Likert scale provided a mechanism for differentiating students' responses (Cohen, Manion and Morrison, 2007) which could then be clarified in strand 2. The number of respondents for each category of question are indicated (*Figure 4.12*).

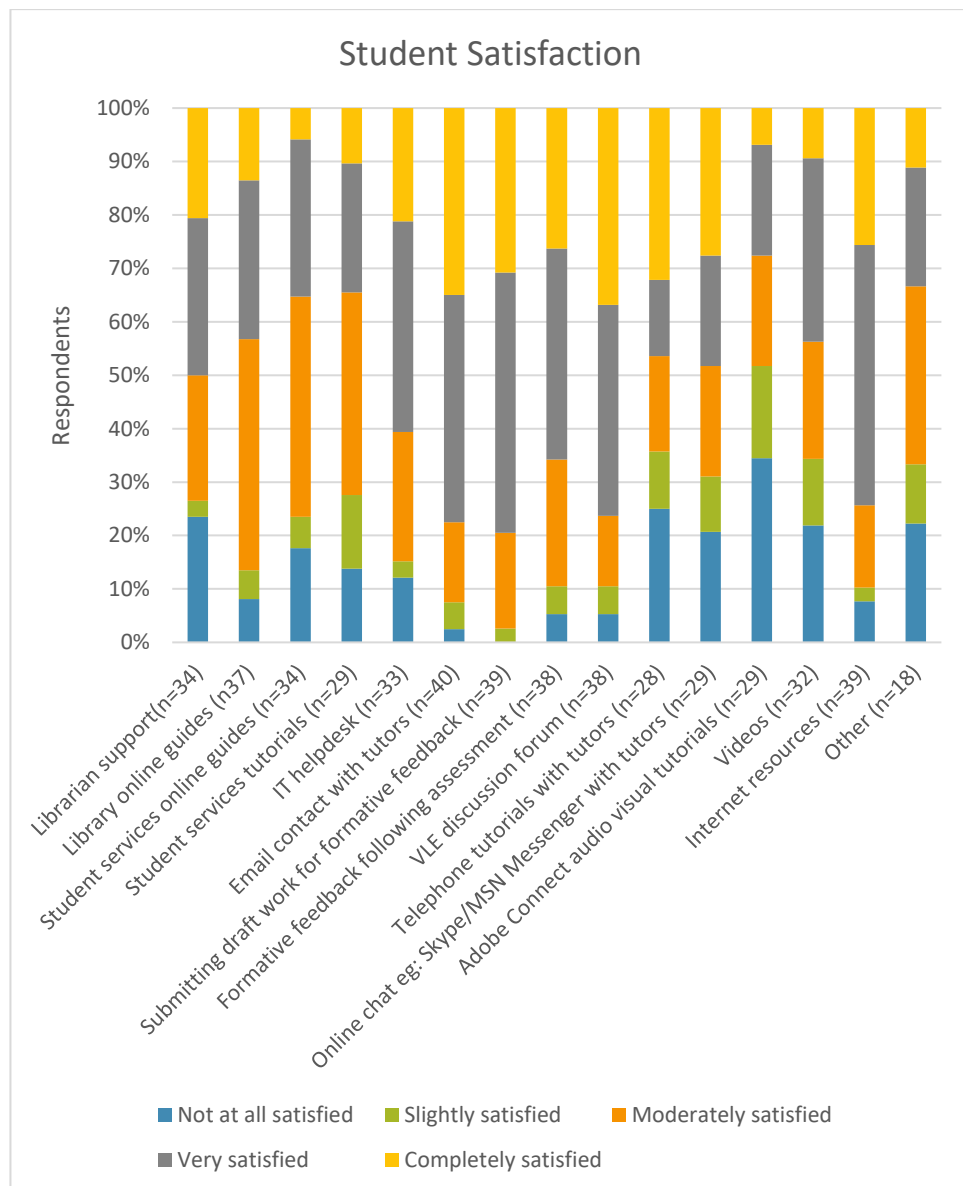


Figure 4.12: Student satisfaction with academic skill development opportunities

¹² Research Question 5: What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

The strand 1 data indicate academic skill development opportunities involving some form of communication and interaction are those which students seem most satisfied with. In particular, 48.8% (n=19) of students who submitted draft work for formative feedback were 'very satisfied' with this academic skill development opportunity. Submission of draft work for formative feedback provides opportunity for personal one to one interaction with tutors and chi-square tests in section 4.7 showed a significant difference in students' use of academic skill development opportunities with personal one to one interactions in preference to those offering generic group interactions. In section 4.8 the submission of draft work for formative feedback was highlighted as an academic skill development opportunity 'often' used by 34.1% (n=14) of respondents, but which only 12.2% (n=5) 'always' utilised. In total, 85.4% (n=35) of respondents indicated they had submitted draft work for formative feedback and, whilst it is pleasing to note that almost half of respondents were 'very satisfied', it is disappointing more students did not utilise this opportunity to facilitate their academic development on a more frequent basis. There are potentially many factors influencing students' submission of draft work for formative feedback, not least of which is the necessity for students to be skilled in planning, organising and managing their time. Tutors can facilitate this by providing timetables with 'soft' deadlines for the submission of draft work and other formative exercises, but there is still an underlying requirement for students' self-management. The submission of draft work for formative feedback as an academic skill development opportunity will be discussed in chapter 6 in relation to students' use of academic skill development opportunities where there is one to one interaction in preference to group interactions, since this is a key finding.

In section 4.6, 97.7% (n=42) of respondents were aware of the availability of internet resources as a source of academic skill development. In section 4.7, 90% (n=37) of respondents indicated they used internet resources as an academic skill development opportunity. In terms of students' satisfaction with internet resources as an academic skill development opportunity, 48.8% (n=19) of respondents indicated they were 'very satisfied'. However, the suggestion was made in section 4.7 that students at all levels of learning may not be adequately skilled in searching for and identifying robust resources. Although 100% (n=11) of Masters' level respondents indicated they used internet resources, undergraduate students represented a higher proportion (70.3%, n=26) of the responses to that question. Whilst students' ability to search for robust resources cannot accurately be determined by this research study, the cross-tabulation table showing students' satisfaction with internet resources by level of study (*Figure 4.13*) does perhaps give some indication that undergraduate students are less skilled at searching for internet resources and thus, are less satisfied with the sources they

find. Students' use of internet resources, in preference to university generic resources, is a key finding which will be discussed in chapter 6.

Q9n: How satisfied are you that these academic skill development opportunities meet your needs? - Internet resources * Q1: Which level of course are you studying? Cross-tabulation

Count		Q1: Which level of course are you studying?			Total
Q9n: How satisfied are you that these academic skill development opportunities meet your needs? - Internet resources		Foundation Degree	Bachelor Degree	Masters' Degree	
	Not at all satisfied	2	1	0	3
	Slightly satisfied	1	0	0	1
	Moderately satisfied	3	2	1	6
	Very satisfied	9	4	7	20
	Completely satisfied	4	4	2	10
Total		19	11	10	40

Figure 4.13: Students' satisfaction with internet resources by level of study

Interestingly, the highest level of students' satisfaction with the library online guides showed 43.2% (n=16) of respondents to be 'moderately satisfied', with 41.2% (n=14) 'moderately satisfied' with the student services online guides. Students showed a high level of awareness of the availability of these online guides in section 4.6, but comparison in section 4.7 between students' awareness and their use of these generic resources as an academic skill development opportunity revealed surprising results (Table 4.9). This comparison and results from the QUAL online, audio-visual, semi-structured interviews appear to confirm that students make deliberate choices in the academic skill development opportunities they utilise and the generic university guides are not a preference. From a university perspective this huge resource demonstrates a disappointing level of satisfaction and appears to not be fully utilised by ODL students, based on this data set. This will be discussed further in chapter 6.

	Availability	Use
Library online guides	90.2% (n=37)	65.8% (n=25)
Student services online guides	83.3% (n=35)	47.5% (n=19)

Table 4.9: Comparison between availability and students' use of generic university online guides

The data showed 37.9% (n=11) of respondents were 'moderately satisfied' and 24.1% (n=7) were 'very satisfied' with student services tutorials. This is a somewhat confusing result since 63.4% (n=26) of respondents 'never' accessed these tutorials (Figure 4.6). Only 29 students provide a level of satisfaction for student services tutorials (missing

n=14) so it is difficult to make inferences about students' satisfaction with these tutorials, except to say that those students who do use this opportunity seem moderately satisfied with the service. *Appendix 13* shows the IT helpdesk, email contact with tutors, submitting draft work for formative feedback, feedback following summative assessment, the VLE discussion forum and internet resources all indicate median and mode responses of 'very satisfied'. Although the IT helpdesk is infrequently used by students (*Appendix 12*), those who do access it seem very satisfied with the service they receive (*Appendix 13*). It is impossible to deduce from the data set whether students used the IT helpdesk as an academic skill development opportunity or to help them resolve IT problems, but students' high level of satisfaction is nonetheless a positive outcome from a university perspective.

4.11 Contribution to students' academic development

The final question on the questionnaire asked participants to indicate, using a five point Likert scale, whether the academic skill development opportunities had contributed to their academic development. This addressed research question 5¹³. Although research question 5 was designed primarily to collect qualitative data via the strand 2 online, audio-visual, semi-structured interviews, the online questionnaire provided opportunity for the collection of preliminary data about students' perception of the academic skill development opportunities in contributing to their academic development. The Likert scale provided a mechanism for differentiating students' responses which could be clarified in strand 2. The number of respondents for each category of question are indicated (*Figure 4.14*).

¹³ Research Question 5: What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

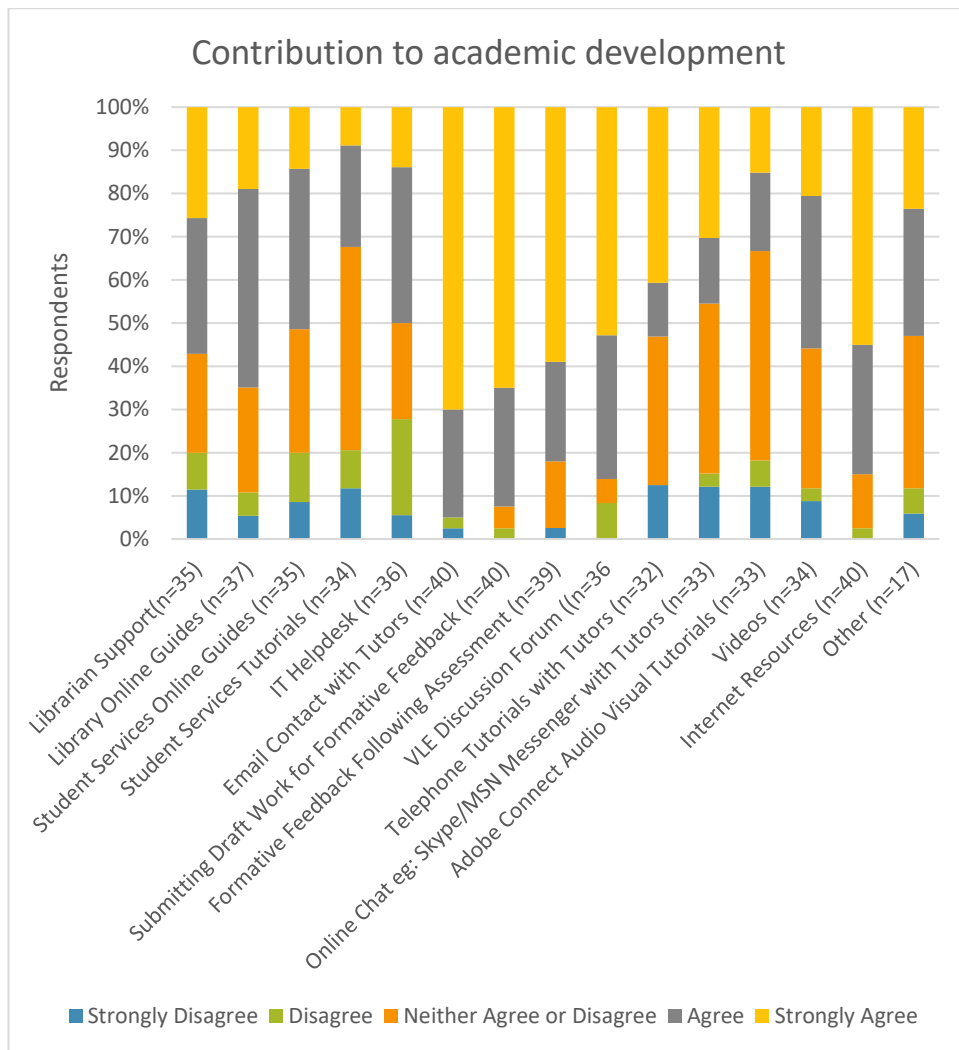


Figure 4.14: Contribution to students' academic development

As a general overview, the strand 1 results suggest strong contribution to students' academic development from email contact with tutors, draft work for formative feedback, formative feedback following assessment, the VLE discussion forum and internet resources. The median and mode responses (*Appendix 14*) are 'strongly agree' for email contact with tutors, submitting draft work for formative feedback, feedback following summative assessment, the VLE discussion forum and internet resources.

This final section establishes whether students' choice for specific academic skill opportunities is determined by the reason for their accessing that source, rather than simply a preference for the nature of it. The reasons students were offered in question 8 of the online questionnaire for accessing academic skill development opportunities will be used to facilitate this discussion:

➤ *To improve my grades*

Thirty three students identified email contact with tutors as the predominant academic skill development opportunity to help improve their grades, with 65.0% (n=26) of respondents who 'strongly agree' email contact with tutors contributed to their academic development. Submitting draft work for formative feedback and formative feedback following assessment were also identified by 29 students as opportunities used to facilitate the improvement of their grades. Email contact with tutors and the feedback mechanisms provide opportunity for personal one to one interaction with tutors and in section 4.7 chi-square tests showed one to one interactions were a significant preference for students compared to generic or group interactions. When asked whether these opportunities contribute to students' academic development, the median and mode responses of 'strongly agree' support this. Students' preference for opportunities for personal one to one interaction will be discussed more fully in chapter 6.

Thirty students identified the VLE discussion forum as an academic skill development opportunity which they used to facilitate the improvement of their grades. It is impossible to decipher the full usage of the VLE discussion forum from the data set, but analysis in section 4.8 indicated the VLE discussion forum is not utilised for academic skill development opportunities. It is clear students rate the VLE highly in terms of its contribution to their academic development since the median and mode responses are 'strongly agree', although the context of this contribution is unclear. One explanation might be that online discussions within the VLE are part of summative assessment and thus students view this as contributing to their academic development. Alternatively, opportunities for clarifying assessment, motivation and peer support are all potential factors contributing to students' academic development and which could be facilitated within the VLE discussion forum.

Interestingly, 28 students used the internet to improve their grades. It is impossible to ascertain from the data set whether students searched for their own resources or, as highlighted in section 4.6, students were directed to specific internet resources as part of module activities. However, only 21 respondents indicated internet resources were included as part of a module, so it is reasonable to suggest embedding of academic skill development opportunities, if it does exist, is not common practice across the university.

The library online guides were used by 21 students to help improve their grades. In section 4.10 a noticeable gap was observed (*Table 4.9*) between students' awareness of the availability of the library online guides and their use of them. Whilst students in strand 2 highlighted the Harvard referencing guide as being a particularly useful

resource, it would appear that university resources are under used by students, although the median and mode responses (*Appendix 14*) show that students 'agree' the library online guides contributed to their academic development.

➤ *To become more confident writing my assignments*

Email contact with tutors was the key academic skill development opportunity used by 30 students to become more confident in writing assignments. The VLE discussion forum was also identified by 29 students as a mechanism for enhancing confidence in assignments. The internet was used by 26 respondents and thus it would appear students use a range of academic skill development opportunities with no interaction, one to one interaction and group interactions to increase their confidence in writing assignments.

➤ *To help me manage my studies better*

The VLE discussion forum (n=22), email contact with tutors (n=23), submission of draft work for formative feedback (n=20) and the internet (n=22) were the primary academic skill development opportunities used by students to help them manage their studies better. However, a noticeable reduction in the use of all academic skill development opportunities is observed and it would appear this is not a key reason for students to use the opportunities available to them. That said, the main observation is the similarity in the number of students using each academic skill development opportunity to help them manage their studies better and also because they are included as part of a module. This may represent tutors' use of strategies to facilitate students' management of their time, such as structuring module content into weekly units of learning.

➤ *My tutor suggested it*

Tutors explicitly suggesting students use academic skill development opportunities does not appear to be a strong reason for many students' use of the opportunities available to them. Responses are much lower across the range of academic skill development opportunities, although the internet (n=10), IT helpdesk (n=10), email contact with tutors (n=12), submitting draft work for formative feedback (n=11) and the VLE discussion forum (n=11) are the most prevalent academic skill development opportunities which tutors suggest students utilise. Personal experience surmises these opportunities represent mechanisms for helping students resolve problems (the IT helpdesk) and may be indicative of tutors encouraging student engagement in their ODL course.

➤ *I failed an assignment*

All students who reported they had failed an assignment (n=3) appeared to use a variety of academic skill development opportunities. Telephone tutorials, online chat and Adobe Connect tutorials are utilised least (n=2). Closer inspection of these

students' data revealed these results correspond to the availability of these academic skill development opportunities, or in the case of R37, not knowing whether telephone tutorials and Adobe Connect tutorials were available.

➤ *They are included as part of a module*

The internet (n=21), email contact with tutors (n=20) and the VLE discussion forum (n=21) were again the primary academic skill development opportunities used by students, but on this occasion this was because they were included as part of a module. It is interesting to note only 17 students submitted draft work for formative feedback because it was part of a module, when substantially more students used this academic skill development opportunity to improve their grades or to become more confident in writing assignments. This difference may be explained by the fact this is 'normal practice' across all modules in students' courses as opposed to it being a module specific academic skill development opportunity. It is surprising to observe that only 19 students claimed to use formative feedback following assessment because it was included as part of a module. Since all students will have taken part in summative assessment, interpretation of this response is difficult within this data set. However, this response may be indicative of an absence of formative comments in feedback following assessment, students not recognising formative feedback, or that students did not utilise formative comments to enhance subsequent assignments.

4.12 Chapter summary

This chapter presented the results of data collected from 43 online questionnaires using Survey Monkey. The online questionnaire was used to gain an understanding of the academic skill development opportunities available to ODL students at the HEI at which I work, and students' perception of the contribution these opportunities make to their academic development and in meeting their needs and expectations. Results were presented in the order by which questions were asked on the online questionnaire since these were designed to address the research questions. During the process of data analysis, results from the strand 2 QUAL data were introduced to help clarify or substantiate emerging themes from the strand 1 QUAN data. This reflected the interaction between the QUAN and QUAL data in this sequential QUAN→QUAL mixed methods study depicted in *Figure 3.2* (chapter 3).

Anonymity of respondents was maintained throughout this chapter, but where specific students' data was discussed, they were referred to via use of an 'R' and the number corresponding to their online questionnaire.

A variety of findings emerged from the results which can be summarised as follows:

- QUAN Finding 1: Various academic skill development opportunities are available to students.
- QUAN Finding 2: Students perceive librarian support is not available to them.
- QUAN Finding 3: Students choose to use internet resources in preference to the university generic online materials.
- QUAN Finding 4: Students use academic skill development opportunities where there is personal one to one interaction in preference to generic group interactions.
- QUAN Finding 5: Students use academic skill development opportunities for personal development.
- QUAN Finding 6: The internet and academic skill development opportunities where there is 'human' interaction contribute to students' academic and personal development.

The next chapter presents the findings from the strand 2 QUAL data.

Chapter 5 Strand 2 results from online, audio-visual, semi-structured interviews

The purpose of this study is to identify academic skill development opportunities available to distance learning students at the Higher Education Institution (HEI) in which I am employed. In addition, the opportunity to explore whether these opportunities make a positive contribution to online distance learning (ODL) students' academic development is being addressed. In the previous chapter the results of the strand 1 (QUAN) data were presented and analysed. This chapter presents the data obtained from five strand 2 (QUAL) online, audio-visual, semi-structured interviews. The average time for the interviews was 28 minutes; the shortest one being 19 minutes and the longest taking 35 minutes. All interviews were dual recorded, using the integrated system within Adobe Connect plus a digital recorder as a back-up. This worked well except for the first interview where the interviewee's responses could not always be heard (possibly due to the interviewee sitting some distance from their microphone). Frequent requests were made for him to speak louder and to position himself nearer the microphone, but after short periods the poor quality resumed. Unfortunately field notes were not made except to note down prompts to probe some of his responses when he finished speaking. The poor quality of the first interview recording meant this could not be fully professionally transcribed, although small sections were decipherable by the researcher and were transcribed to prevent the interviewee's comments being totally lost.

The interviews were used to facilitate the gathering of rich data from geographically remote students which might not otherwise have been feasible due to cost or location. Use of open questions was the primary mechanism for collecting rich data, providing opportunity for clarification of responses in strand 1 and utilising an exploratory approach to understand participants' perceptions of academic skill development opportunities.

A prime ethical consideration for this research study has been the maintenance of anonymity of participants. Therefore all participants in the strand 2 interviews will be identified via a pseudonym which will be 'Interviewee' and a number between 01 and 05 eg: Interviewee 01 (I01).

5.1 Presentation and analysis of the QUAL data

Strand 2 data were collected via online, audio-visual, semi-structured interviews using Adobe Connect. Participants were selected from respondents to the pilot and to strand

1 who authorised their willingness to participate in strand 2 via a closing question on the online questionnaire. The number of students volunteering to participate from the pilot and strand 1 exceeded the maximum (n=17) which had been determined by the limitations of working as a lone researcher (Bryman, 2012; Gray, 2009). However, as a result of the low response rate to strand 1 and concern for the risk of potentially losing valuable rich data, as well as the possibility of participants withdrawing prior to the interviews, the decision was made to invite all volunteers to participate in the strand 2 interviews. This proved to be a valuable decision since only five students responded to the emails inviting them to participate in the interviews. Extending the deadline for responses to the invitations to participate did prompt one further student to make contact, but they failed to log in to Adobe Connect at the mutually arranged appointment time. Thus a total of five interviews were held. IO1 was the student identified in chapter 4 as having completed duplicate responses to the strand 1 online questionnaire. Comparison of his responses showed some differences and these are referred to during this chapter.

The small number of participants for strand 2 led to concerns regarding representativeness of the sample, although Gorard (2010) contends sampling error primarily relates to random sampling methods. In this research study the original sample was made using non-probabilistic sampling so no claims to generalizability were made, although non-probabilistic sampling does imply that some elements of the population are more likely to be selected than others (Bryman, 2012). Maxwell (2013) suggests qualitative studies often employ small samples of uncertain representativeness where there are no claims for generalizability, but where adequate description, interpretation and explanation of the sample are developed. The intention for the interviews had been to capture the views of students across a range of levels of learning, but sampling for strand 2 was reliant on participant self-selection and unfortunately no Masters' level students volunteered. That said, the views of Masters' level students were captured during the pilot and strand 1. Inclusion of Masters' level students in strand 2 would have been preferred, but careful analysis of the strand 2 data showed students shared similar views about their experiences and greater diversity of participants may not have led to an increase in the quality of the data or different responses. The data which were collected provided insight into ODL students' experiences with academic skill development opportunities provided by the university and thus were of value in terms of answering the research questions (Teddle and Yu, 2007).

Table 5.1 shows the demographics of each interviewee. Three faculties were represented and all interviewees were studying at undergraduate levels. It was

disappointing not to be able to explore academic skill development opportunities with a Masters' level student since this would have increased the range of levels studying in the sample and the transferability of the findings. Nonetheless, the voices of the five interviewees must not be underestimated and the potential for transferability would remain viable due to the interaction of the QUAN and QUAL data.

	Faculty¹⁴	Level of study	Full time/ Part time	Attendance
Interviewee 01	LAIBS	Bachelor Degree	Part time	Distance learning only
Interviewee 02	LAIBS	Bachelor Degree	Part time	One day on campus per semester
Interviewee 03	FST	Foundation Degree	Part time	Two days on campus per semester
Interviewee 04	FHSCE	Bachelor Degree	Full time	Distance learning only
Interviewee 05	LAIBS	Bachelor Degree	Part time	Campus-based year 1 and year 2. Distance learning year 3.

Table 5.1: Interviewee demographic information

Both manual techniques and NVivo were utilised to facilitate analysis of the qualitative data. Interview transcripts were analysed manually using Braun and Clarke's (2006) framework for thematic analysis as described in section 3.4.2 (chapter 3). This began with the compilation of the following themes and sub-themes, based upon the conceptual framework (chapter 2):

- Academic skill development opportunities provided by the university
- Skill support required
- Timing and trigger points
- Reasons for accessing skill support
- Quality of learning experience

A coding scheme (*Appendix 11*) was generated from these themes and sub-themes, which proved to be an invaluable tool during the data analysis process and in helping to establish key findings. The thematic analysis began with the interview transcripts being read and re-read, with different highlighter pens being used to colour code phrases according to each theme. It became apparent during each re-read of the transcripts that revisions were required of the coding scheme. Revisions were recorded

¹⁴ Faculty Names and Acronyms:
 LAIBS – Lord Ashcroft International Business School
 ALSS – Arts, Law and Social Sciences
 FMS – Faculty of Medical Science
 FHSCE – Faculty of Health, Social Care and Education
 FST – Faculty of Science and Technology

on a Coding Scheme Development Chart (*Appendix 15*) to provide an audit trail and help establish the validity of the study (Bloomberg and Volpe, 2008). For example, the data revealed 'quality of learning experience' had the potential to be either a negative or positive experience and thus this theme was further sub-divided into 'facilitates learning' and 'hinders learning'.

The next stage of the thematic analysis involved uploading the interview transcripts to NVivo. The coding scheme was used again to define 'nodes', but instead of merely copying and pasting sections of text which had previously been manually highlighted, the transcripts were re-read and coded within NVivo. This provided opportunity for further immersion in the data and reflection where any discrepancies occurred between the manual and NVivo coding. NVivo facilitated the compilation of summary tables in which interviewees' responses to each theme and sub-theme were collated. An example can be seen in *Appendix 18* where interviewees' reasons for utilising academic skill development opportunities were recorded. The summary tables were particularly useful during the next stage of analysis where responses to each question on the interview schedule were considered; thus facilitating comparison between interviewees' responses and establishing findings to help answer the research questions.

In this chapter results are presented following the order of questions on the interview schedule (*Appendix 6*). The interview schedule was generated by directly relating it to research questions three, four and five¹⁵, as well as the QUAN results in strand 1 and themes identified from critical review of the literature. Thus, in presenting the QUAL results in this manner, emergent themes will lead to key findings (presented in Chapter 6) which will, in due course, be considered against the research questions. Excerpts from interview transcripts will serve to provide "thick descriptions" (Denzin, 2001, p.99) and emphasise the richness of the data, thereby enabling students' voices to be heard. Integration of the strand 1 data will also occur to highlight similarities or differences in the data.

5.2 Narrative responses to interview questions

Question 1: Do you attend campus for any aspect of your course?

The intention of this research study had been to seek the views of online distance

¹⁵ Research Questions:

3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

learning (ODL) students at the HEI at which I work. University records used to select the sample identified participants as 'Distance Learning', but variation in the nature of 'Distance Learning' within the university was known to exist. This question therefore sought to gain an understanding of whether students attend campus (*Table 5.1*) for any aspect of their course to facilitate interpretation of interviewees' responses about their academic skill development opportunities. Two of the interviewees were studying a course delivered entirely by ODL, with no requirement for attendance. That said, IO4 had attended on one occasion to meet his tutors: "I only went to the Chelmsford building just to say hello really and we had a cup of coffee, because I'm in Essex and they happened to be there as well". The other three students had a requirement for some form of attendance: ranging from an induction day; attendance at the start of each module; attendance for practical teaching sessions (ophthalmic dispensing); or attendance one day per week for the first two years of the course with the third year being delivered entirely by ODL (IO5). Students' perceptions of the usefulness of these opportunities in supporting them with their academic skill development were mixed:

The day's induction that I got was very much this is your folder, this is paper, you need to speak to these people if you were mitigating, that kind of thing. They didn't introduce the library, they didn't introduce maybe where you would be going round campus, anything like that. So from that point of view you were a bit lost, but it was a day where no one really knew anything and I feel by the end of it you didn't really know much more apart from having a folder which you were going to work from. [IO3].

So at the beginning of every new module that we do we meet with our tutor - I do a work-based degree so I don't go to the campus an awful lot but when we start a new module a group of us have a meeting with our tutor and they kind of explain what the module entails, go through a few high level bits with us and then, unless we need to meet up with them one on one to have a chat, I don't tend to go to the campus unless it's just for the library. [IO2].

Our tutor at the beginning told us about local classes that are run at the campus that I'm closest to that were kind of study skills and academic skills classes. So not just sort of how to reference and things like that but study skills in terms of how to manage your time and how to plan properly for a literature review and things like that. So we were made aware of the timetable of these classes and also shown on the VLE

where we could access kind of like the documents relating to those topics as well. [I02].

There appear to be a variety of benefits to these face to face interactions: the opportunity for meeting peers and tutors, thus facilitating engagement in virtual learning environment (VLE) activities; opportunities for meeting support staff such as librarians and student services; and peer support outside the virtual classroom:

I'm the sort of person that I don't like first times of anything. Once I've done something once I'm fine but it's that initial doing something once that I don't like and I think if I hadn't had a face to face tutor that suggested it to me, introduced me to the person that was going to run the session, showed me where the room was that it was held in, if I was only taught online and I'd found out about it by looking on the VLE and saw that it was at a campus near me and thought I'm going to go I probably wouldn't have gone to be honest. [I02].

There's some girls, and other students, that I communicate with who are fairly local to me so if you wanted to meet up, they're half an hour this way, half an hour that way, then we try and, we've had study sessions and things that we've managed to pull ourselves together for. [I03].

Question 2: What motivates you during your studies?

Although the concept of motivation was not a specific aspect of enquiry to this research study, critical review of the literature identified motivation as a key determinant of ODL students' success. This question therefore sought to establish students' motivation for studying their course, as well as strategies or resources they used to raise motivation levels during challenging periods of study. All interviewees conveyed high levels of motivation, including those who had experienced challenges with this mode of learning. For some students their motivation was related to employment:

Career progression initially but having now started and done other things as well it's more a want and a need to develop my personal skills. [I01].

With my degree being sponsored by my company who employs me, there's also an aspect of expectation that I'm going to have to be doing my degree to keep my job. [I02].

...to do certain things I would have to have someone check my work or I couldn't do something if somebody came in because you weren't professionally qualified even though you probably do the work. You couldn't actually do it for them if there wasn't someone supervising. So it

just came to the point where I'm going to do this and just apply for it and get the qualification that you need. [I03].

Even though I02 identified motivation to study due to her employer requirements, she also demonstrated a personal desire for learning when she said "...but on a personal level, I really enjoy learning on a personal side. So I quite often seek out new learning to participate in, so for me it's the excitement of learning something new and processing it all and feeling that you've achieved that at the end". Motivation for I04 was very much about gaining skills which he perceived his work colleagues had gained from their degree level qualifications and which he lacked, yet desired. He commented: "I always wondered if I'd missed out on any particular insights...Like they seemed to be very insightful at certain times, maybe it's individuals I ran into but they certainly seemed to have some very good reasoning, logical reasoning skills". I05 expressed a very personal desire for gaining a higher education qualification by saying: "I've always wanted to do degree level study and I've never had the opportunity before. So I was determined, once my children had grown up and finished their own degrees, that I would do one myself".

For those students who experienced challenges during their studies, their motivation to succeed appears to have been enhanced through personal determination or via the support of peers and work colleagues. I05 refers to the "end game" as a specific motivator when she says: "It was always the end game, always just the fact that I was determined to do it, just absolutely determined to get that degree after all these years...So, yeah, sheer determination to be honest". In contrast, I03 describes the "peaks and troughs" of studying and draws heavily on the support of a supervisor in her workplace, commenting: "if I had an issue I could go to her and I could say 'right this is the problem', or she would maybe notice that I was troughing a wee bit and think 'right come on' and try and fire me up". I03 also refers to the benefit of peer support:

...you could just text one of the other girls and say "Right, come on". Or "This is the problem" and maybe someone would be able to come up with an answer. Or alternatively you knew they were having the same problem which would also sometimes just help knowing that there was someone else. Sometimes when you were down for the three days, actually hearing other people going, "Oh I can't do this" or "This is terrible". It was fantastic because you thought, 'yes there's someone else' and you didn't feel so isolated. So that was quite good.

Question 3: Please explain what you understand by 'academic skills'

Students were asked via the strand 1 questionnaire to indicate (from a list) what they consider to be 'academic skills'. This led to variation in responses so this question sought clarification or confirmation of responses to strand 1 by asking interviewees to articulate their understanding of 'academic skills'. Several students referred to conventional skills such as referencing and writing, but there were a number of interesting responses:

Academic skills I would put down as the writing, researching, the processing of procedure and methods into a learning ability. [I01].

To me academic skills are the skills you need whilst you're completing degree work and kind of higher education level work. So the things like referencing and being able to research in sort of an academic way...it's all of those things that are dictated to you that you need to be able to do in the right way... So not just sort of how to reference and things like that but study skills in terms of how to manage your time and how to plan properly for a literature review and things like that. [I02].

...the ability to obviously attend your lectures and things like that but also to source information independently and have the knowledge how to source that and the various sources you could use, whether it be a library, the internet which can be a variable source, or a book and that kind of thing. [I03].

I guess the academic side is really about how you provide evidence of what you've learned to the course tutor...So it's a set of rules which they've defined that you must comply with in order to demonstrate what you've learned... Conduct, general conduct. I guess there's an ethical element; that's a graduate skill, in my opinion... using the online library or using a library physically if you have to. Submitting assignments in a timely manner, using the correct writing style for the assignment and getting the references and things like that as well. [I04].

Basically I would say the ability to undertake research which is evidence based is what I understand an academic skill to be, and to study a particular topic in great depth, to understand the value of evidence-based data, for instance, that I now look at and produce...

Communication skills, the ability to communicate both verbally and in writing and much more in-depth skills about the actual topic that's being studied...You've got to have an incredible ability to be able to explain

yourself in writing, but also the importance of understanding what your tutor is trying to get over, which is very difficult when it's someone that you haven't actually met... So do you think writing in itself is a skill? Yes, definitely, yes. And the ability to explain what you've learnt and what you're trying to get over in as concise a way as possible. [I05].

Students' ideas about academic skills largely replicated results from strand 1 and confirmed that students have a robust understanding of the term 'academic skills', with the following skills being most commonly referred to:

- Referencing skills
- Writing skills
- Time management
- Literature searching
- Planning assignments
- Identifying useful resources

Students' definitions of academic skills also showed some alignment with the literature. It was clear that students very much understood the contribution these skills made towards their academic success, but none of them referred to the development of transferrable skills for employment (Drew and Bingham, 2010). Although IO4 was motivated by the insightfulness and reasoning skills he perceived his work colleagues had achieved via their university education, even his explanation of academic skills was focussed entirely on the need to meet the requirements for assessment. Whilst academic standards for different levels of learning explicitly refer to affective and transferrable skills in university academic regulations, emphasis in day to day teaching and learning or university generic skills support may not convey this to students. This is a potentially interesting aspect of research into the academic skill development opportunities available to students which may be discussed further in chapter 6. The decision to include this discussion in chapter 6 will be dependent upon students' responses to question 10 in which they were asked to explain how academic skill development opportunities contributed to their academic development. If students make reference to skills which have impacted on their professional development, then this will be discussed in chapter 6.

Question 4: How did you find out about the various academic skill development opportunities that are available to you?

When asked this question, some students reported a lack of explicit direction to academic skill development opportunities or lack of embedding resources in modules. In particular, when I01 was asked how he had learned of the academic skill development opportunities available to him, he explained: "A lot was through trial and error (erm) because when you're asked to write a report you don't always know what a report should look like or you don't know what a reflective piece of writing looks like and the criteria you need to meet. Some of this information wasn't always available in the module (erm) and within the textbooks". I01 was asked whether he felt empowered or frustrated by this need for personal searching of information to support his learning and he responded: "It's very, very frustrating (erm) because unfortunately working full time it's still a three year course so you're still doing the same amount of work as a full time student so you're having to fit everything in with your family life and finally produce a paper and get a good mark".

In contrast, other students explained:

Our very first assignment I feel was a mini study skills on everything because we had to put together a portfolio, one part of it was literature review, one part was like a project plan and things like this. So pretty much everything we've had to use on a much bigger scale in the next two years of the degree. A lot of them we'd done for the first time in that first module so that was kind of like a good introduction where we were given an overview of what it was, what was expected of it and then kind of did a mini version of it, which looking back now, I didn't see at the time, but looking back now was really helpful to have done. [I02].

There's definitely guidance given and also the marking came back on the early modules guiding us. But there were examples for referencing. The Anglia site has quite a detailed guidance on that. We were directed to that...again, they provided us with workshops online in the VLE to read and look at. [I04].

I think it was one of the very first modules in the first year...in a classroom setting where we did precisely what I've just explained really, where you'd be asked to write about something and then told right, now write the same thing but 20 words, so it's just the sorts of words that you use, the words that you leave out, so it was very definitely a taught skill. [I05].

Interestingly IO4 referred to use of the Student Handbook (a generic university document which can be contextualised by course leaders) as a tool to facilitate development of referencing skills, but the timing of this information in the Student Handbook (usually issued at the start of the course) appears to be less than helpful:

I'm sure it was in the student handbook but only in retrospect. I don't think I realised until quite late in the course that the student handbook had information that would be useful for the modules, completing the work. So the way they present, they look like a glossy magazine almost to tempt you to attend a university as a starting point. So all the guidance I actually used was in the module, in the VLE in the modules.
[IO4].

Interviewee responses to this question give the impression that students were generally directed to academic skill development opportunities, although the information they received was not always in an appropriate format or received in a timely fashion. To summarise, students identified the following ways by which they were directed to academic skill development opportunities:

- Portfolio style assignments which include different elements requiring varied writing styles and presentation
- Formative feedback following summative assessment with examples of writing and referencing provided by tutors
- Direction to the university Harvard Referencing Guide via feedback mechanisms
- Online activities within the VLE
- Student or course handbook

IO1 expressed frustration at the lack of explicit direction regarding the format of specific types of assessment. His comments regarding the competing challenges on ODL students' time, particularly when studying a full time study load, emphasise the need for tutors to embed academic skill development opportunities into module content at appropriate times in order to facilitate time management. These issues will be discussed further in chapter 6.

Question 5: How did you decide which academic skill development opportunities to access or make use of?

The reasons for students accessing academic skill development opportunities appear to be varied. Some students demonstrated aspiration for self-directed learning, taking responsibility for developing their skills either because there was an explicit need for a

specific module, or because they identified a personal development need:

I guess mine were quite reactive rather than proactive so it was, if I felt I was struggling with something or not fully grasping a concept of something then I would seek extra help for it rather than thinking "Right I've got a module coming up which includes this". So I think if I was studying full time and had the free sessions in the day when I wasn't in lectures and things like that I would have perhaps proactively gone on them. But with my time, because I work full time five days a week, I can't sort of think what might be useful in the future for me. I've got to do things which are going to definitely prove to be useful. [I02].

Well, referencing was something that was completely and utterly alien to me. I had no idea about it whatsoever, and I think in one of my first assignments I was criticised because my referencing was poor. It was just such an alien thing and I don't know that the university sort of appreciated that, particularly maybe as a mature student so not having recently done 'A' levels or anything. I was pretty terrified of referencing from then on in. And so as that was something that I really had no experience of and really needed to properly understand. I suppose I took advantage of that one knowing that it's something I desperately needed. [I05].

On a more practical level, some students made their decisions for accessing skill development opportunities based on current learning requirements. For example, I04 said: "I think I was just, I wouldn't say thorough, but I didn't want to ignore any of the advice so I reviewed it all. All the advice I was directed to I made sure I reviewed and if it made sense then I guess the level of review was less. If it didn't make any sense then I would be more thorough in what I was reading about. I didn't want to lose marks or struggle simply because of not spending the time required to look at all the material." This does not give an impression of a student who is any less self-directed, but rather a pragmatic approach to effective time management and an aspiration to achieve high marks in assessment. I02 also makes a reference to the need for managing time, not just study time, but balancing studies with work and personal commitments:

So I read the online guide to it first and I think it was on literature review that I was struggling. I just couldn't get my head around the concept of it, so after having read the guide I looked at the timetable. It fitted in with what I was doing at work that day so I popped along. It was only for an hour and it was really beneficial actually. So that kind of prompted me to

then go to another one that I found really relevant and to suggest them to a couple of others that I knew were struggling. [I02].

Interviewees' reasons for accessing academic skill development opportunities aligned with the most prevalent reasons identified in the strand 1 data, namely: to achieve good marks in assessment and to become more confident in writing their assignments. All students expressed a clear desire to do well and thus their reasons for using academic skill development opportunities were primarily to facilitate personal development. Students seemed to adopt a pragmatic approach in deciding which academic skill development opportunities to use, largely based upon the management of their time.

Question 6: Were there specific points during a term when you would access various opportunities?

Responses to this question largely highlight preparation of assignments as points when students accessed skill development opportunities. IO3 commented: "Maybe if you had a particular assignment you would have to look at what the assignment was and then really what was going to be required for that assignment. So if you then had to access statistics..." and she goes on to explain about a specific national policy document accessed via a reference library in her geographic location. IO5 identified the need to understand how to cite a specific type of document. She had already accessed the university referencing guide, but since this did not provide a relevant example to meet her specific needs, she decided to attend a campus-based session:

I remember particularly struggling with finding how to reference a piece of legislation...I actually went to a one-off session on Harvard Referencing that the university was doing... but it was too basic. By the time I'd done it I'd already sort of been probably there for about six or seven months maybe. And so it was only really covering the easy bits, and what I was looking for was the more difficult questions that you have. I mean no problem referencing a book or a journal, it was when it was to do with an article on a website or something a bit different, or a piece of legislation. [I05].

This example illustrates the challenges for support staff and students with generic skill support sessions, whereby sessions are not targeted at individual students' needs, but attempt to meet the needs of students across courses and faculties and at different levels of learning. In response to question 5, IO2 referred to being reactive in her decisions to access academic skill development opportunities. In addition, when asked if it would have been beneficial to have attended the referencing session at the start of

her course, IO5 agreed, saying: “Yes, yeah, well probably, yeah, and maybe they were available earlier but I didn’t go”. IO5 also recalled that information about these study sessions was “up on a board and so it was very visible”, which perhaps emphasises the requirement for tutors to embed skill sessions within core teaching materials.

Question 7: Are academic skill development opportunities part of your course curriculum within different modules?

The data revealed a number of points in response to this question. Some students did comment positively on academic skills being explicitly included within various modules. However, it is not apparent from the data whether students were introduced to different or more progressively advanced academic skills in successive modules. Several students were not aware that academic skills had been included in their curriculum. For example, IO1 responded: “No or if it was I’ve neglected to pick it up”. Closer inspection of IO1’s duplicate responses to the strand 1 online questionnaire revealed that at the first time of completion he did not select ‘they are included as part of a module’ as one of his reasons for using academic skill development opportunities, but on the second occasion he did. It is difficult to make a robust interpretation from these varied responses, although it might be reasonable to conclude that if academic skill development opportunities were included in any of his modules, this was not very explicit. IO4 was the only other interviewee to select ‘They are included as part of a module’ as one reason on his strand 1 questionnaire for using academic skill development opportunities. Unfortunately, due to an oversight, this was not explicitly discussed during the interview, although IO4 did refer to a patchwork text assignment which included specific guidance on making an individual learning plan. The explanation provided by IO4 referred to the module timetable, a schedule of tutorials and explicit instructions regarding compilation of the patchwork text assignment and use of references. This would appear to be a good example of embedding academic skill development opportunities within a module, especially since they are targeted at assessment. However, it is perhaps questionable whether all students would recognise this as ‘taught’ academic skills and this is something for discussion further in chapter 6.

When asked whether academic skills were included as part of her course, IO3 commented: “I wouldn’t say we were taught skills, no”. Similarly, IO2 had clearly learned various skills, but did not assimilate the learning activities with the teaching of these skills:

I’m not sure whether you classed it as taught or not. Earlier on in the degree when we had a lot of face to face time with our tutors I’d say a lot

of that was taught...I guess it wasn't formal, "We are now teaching you to critically analyse things" and things like that, but in effect that's what we were doing and we were learning the skill set to be able to apply that in our assignments. So I don't know whether, just because they didn't label it that whether you wouldn't class it as that. But to me it definitely came across as being taught how to critically analyse and how to conduct your literature review and things like that. [I02].

In this previous example I02 was reflecting upon the first two years of her course which had a weekly requirement to attend campus. I02 was therefore asked to comment on whether her ODL tutors (in year 3) had provided similar guidance, to which she responded: "I've found it very much dictated by myself which I've liked because it hasn't kind of been forced down my throat, but equally it's been there whenever you've requested it". This may be indicative of contrasting methods for supporting students at Levels 4 or 5 and 6, or perhaps tutors' expectation that Level 6 learners are more self-directed in their learning. Whatever the interpretation of the different strategies for delivering academic skill support, I02 appeared content with the approach, which was possibly a reflection of her personal approach to learning, whereas a less confident learner might feel more vulnerable and lacking in support. I04 expressed a similar (but less positive) experience with support at Level 6, referring to tutors' "encouragement of independent research". However, this had a negative effect on I04 who explained:

...they left it for us to contact them and I, because of things that were said about, as the course went on, that we should be more independent, at Level 6 or so, Level 5 even, I felt that it was better not to get in touch with them...I wonder if it would have hurt the gradings if I did bother them continuously. [I04].

Since the need for independence appears to have been emphasised by (or to) I04, he was asked if skills in how to be an independent learner were taught. This drew a negative response, although other lower level academic skills were taught:

We had modules on reflection, so we certainly were taught that. We were directed to the reading and one of our modules, two of our modules were to show what we'd learned about it... We were encouraged to use the library, encouraged to use the librarians and was there a tutor, not really, so we were certainly told that we should be using the library, buy some physical books from Amazon on the second hand market...We weren't taught how to use it. [I04].

I05 explained in detail the strategies included within the curriculum to teach writing skills, although this had been during campus-based attendance and not ODL. She

emphasised: “It was taught in the first year, very definitely taught in the first year, and then I rapidly realised that if I was going to score any marks on my assignments then I had to be able to do it much better, so I suppose that was a point of teaching myself just by writing and then re-rewriting and then re-writing a paragraph”.

Most students referred at some point during their interview to the constraints upon their time as an ODL student with respect to balancing their work or personal commitments with their studies. One student commented explicitly on the strategies employed by ODL tutors aimed at facilitating students’ time management:

It was a patchwork. So we were directed to the guidance on making an ILP. Sorry, what's an ILP? Individual learning plan. So we were shown the module guide, which would explain the learning outcomes. There'd be a calendar, week by week tutorial which would guide us towards the patches that we needed to do and then it became evident that to submit the module, you bring all your patches together and then write a final stitching patch and then there was a preparation week for making it ready for assessment and another week for proofreading and so on. So it was firm guidance on when to do each thing. [I04].

I04 found this structured format very useful, but he also explained the impact on individual students and the group as a whole when students were unable to adhere to the recommended timetable:

Me and most of the others have full time work as well. I did try to keep pace with the module guide and well basically they had tutorials allocated to each week of the semester and you felt that you had to keep in line with that in order to participate in the discussion on the VLE. People who fell behind or waited until the end to actually do all the work at the end of the semester were not participating in the VLE discussions and really the cohort suffered as a whole to a certain extent because of the fewer numbers who were involved actively in the discussions. [I04].

Responses to this question demonstrate that some tutors employ a variety of strategies to facilitate ODL students’ learning and development including, on occasions, inclusion or embedding of academic skills into module content. That said, a few students were adamant that skills were not included as part of modules, resulting in students proactively sourcing information to supplement their learning. The concept of embedding academic skill development opportunities in modules will be discussed further in chapter 6.

Question 8: To what extent is the 'human' aspect of study skill support important to you?

The literature review identified tutors as an important determinant in the quality of students' higher education experience. Results from strand 1 also highlighted that students primarily used academic skill development opportunities involving one to one interaction. At interview this question sought to ascertain whether interviewees considered it important that the opportunities they utilised were facilitated by a person as opposed to being a text-based document, video or other type of reusable learning object.

All interviewees had made use of some of the generic university study guides available via the library website. Although these were largely well received by students, particularly the Harvard Referencing Guide, one student did make comments which seem to be about accessibility of the information. I04 explained:

Although I accept that there's absolutely everything there within those study skills, when you're sitting on your own at home the thought of ploughing through various things trying to find what you're looking for and never quite finding what you're looking for, I think in the end you just sort of find your own ways of doing things. I think the only study skills documents that I really used were around Harvard Referencing...I really found that having it on my desk by my side was incredibly helpful.

On the occasions when students accessed campus-based skills sessions, students found the opportunity for face to face interaction valuable. The librarians were considered to be helpful and approachable, including email exchanges:

For me it was completely the human aspect of that interaction that led me to go. I think it was better because you can always be given slides and you can always be given documents but without somebody standing there and talking through slides and, even if they read like word for word, they're there for you to ask questions and all sorts. So for me I'd always prefer to go and have a session on it even if it's an hour long, than just read a document and try and absorb it myself. [I02].

...the girl at the library was very open, very helpful and later on she gave me her email and I emailed her a question and again she got back to me very quickly with "This is what you want to be doing". So you knew she'd be there as another source of information. [I03].

I did email the librarians twice and I did get very quick answers and direction from them. It was quite trivial questions...I said the area of interest that I had and they suggested a number of alternative searches I

could do and obviously would have offered more help if I'd asked them.

[I04].

Interaction with tutors, whether face to face or via virtual methods, was also considered important, although students' perceptions about the skills and attributes of their tutors as someone to turn to for help or advice was rather mixed. For example, I03 thought the 'human' element was: "...reasonably important because obviously we're human beings. I think you react very well with someone you feel they're open or they're open to you approaching them. There are one or two lecturers who were definitely not approachable but that wasn't just my opinion; that was the vast majority's opinion". Interestingly this opinion was gauged from face to face interactions on campus and not merely via the VLE. I03 continued:

It was the whole demeanour of this person. But equally if you emailed a question it was a very curt; it was the shortest response you could get. On the flip side to that, the information that that person put on the VLE was one of the most comprehensive and her lectures were good. From an informative point of view they gave you what you needed to know, but she wasn't someone that came across with any warmth unfortunately. [I03].

I05 described the level of human interaction as being: "very, very important" but went on to explain:

... I'm sad about my last year because I...I had fantastic tutors, three out of four. One unbelievably let us all down in my view, but the other three were wonderful, and certainly the tutor for the main project was available monthly for a Skype session and that human contact, actually looking at him and talking to him was really valuable and I wouldn't have wanted to have missed that...I think that there should have been a residential weekend or some sort of option of getting together at the beginning of the year so that there was some human contact...In the third year there was absolutely none of that so I really felt that I was on my own despite three out of the four tutors being incredibly supportive and acting on the VLE. [I05].

I04 seems to have had a similar experience but perceived the lack of tutor contact as the tutor's encouragement of independent learning:

There were two tutors throughout the course and there were two modules per semester and each tutor took a module. They took a slightly different approach. One of the tutors was more encouraging of independent research and independently pursuing it all and the other

was more specific about helping us really, I suppose. So there would be a very clear, in the case of the latter, there was a very clear tutorial each patch. It was quite well organised and the other tutor really did a certain amount of that but I felt it wasn't as handed over to us. It was encouragement of independent research. Not to say that the other one didn't encourage us, but you could get by without it so much. [I04].

Interaction with tutors or support staff is evidently important for ODL students, but interviewee responses have highlighted that communication, whether in person or via virtual methods, has to be personable. Responses to the strand 1 questionnaire indicated that academic skill development opportunities where there is one to one interaction are preferred by students. These opportunities also exhibited higher levels of satisfaction, but this was impacted by communication which was perceived negatively by students. Closer inspection of the interviewees strand 1 responses for librarian support and email contact with tutors (*Table 5.2*) showed high levels of satisfaction. Satisfaction with librarian support differed considerably for IO1 between completion of his first and second questionnaire. It is impossible to explain this with any level of certainty, but IO1 may have had a positive experience in communicating with the librarian team before the second questionnaire was completed, or it might be a result of a difference in his temperament on the two dates the questionnaires were completed.

	Librarian support	Email contact with tutors
Interviewee 01 ¹⁶	Not at all satisfied / Completely satisfied	Very satisfied / Completely satisfied
Interviewee 02	Moderately satisfied	Very satisfied
Interviewee 03	Very satisfied	Very satisfied
Interviewee 04	Completely satisfied	Completely satisfied
Interviewee 05	Completely satisfied	Very satisfied

Table 5.2: Interviewee satisfaction with librarian support and email contact with tutors

Question 9: Why have you used the various academic skill development opportunities that are available to you?

All students demonstrated a very proactive approach to academic skill development which seems to have been underpinned by the desire for personal development and success, thus confirming the strand 1 data. That said, IO4 conveyed a more pragmatic stance when he explained: "I think it was always to achieve what was described in the

¹⁶ Completion date questionnaire 1: February 10th, 2015
Completion date questionnaire 2: March 10th, 2015.

learning outcomes. So if there hadn't been a requirement to do it for the course, I wouldn't have sorted it out". IO4 did comment on his strand 1 questionnaire that academic skill development opportunities were included as part of a module, so this would confirm the pragmatic approach. However, he also exhibited a desire for personal development with the aspiration to become more confident writing assignments. In contrast, IO3 said: "Not only to get to the end point of the course, but also to further my knowledge". IO5 demonstrated a very strong desire for personal success, but her prime reason for accessing support for referencing skills was triggered by feedback following assessment:

Well I proactively sought it out. There wasn't feedback in the assignment that suggested I did a session on it, but there was feedback to say the referencing was poor. I can't remember if it was poor or could be improved or what it was, and I thought "How stupid I am. I'm getting positive marks about what I'm writing but I'm losing marks because of the referencing", which to be honest I hadn't taken seriously enough. I hadn't realised the importance of it. [IO5].

It could be argued that IO5's response to feedback was reactive rather than proactive as she suggests. I would argue students who act upon feedback following assessment are doing so reactively since they are responding to a past assignment, as well as proactively because they desire personal development and improvement of their skills in preparation for their next assignment. Although IO5 recognised the need for improving her referencing skills, the feedback nonetheless had a lasting impact on her:

Yeah, it just made me feel very stupid. I'm not criticising the comment because the comments were necessary because the heart of the referencing was poor. But it just made me think, you know, at the end of the day you've got to, to a certain degree, toe the line here and you've got to follow certain things and if the referencing is that important then you'd better start taking it seriously and learning how to do it properly. And so from then on in...it has been that study skills document that has kept me on the straight and narrow.

Feedback for IO2 also served as a prompt for accessing skill development opportunities on occasions, but her perceptions of the feedback itself were different to IO5:

I've always been in the position where I've submitted something knowing it wasn't my strongest section. If they've commented on it afterwards then I've always kind of known beforehand and perhaps thought I should have asked them about this before I've submitted it because I know that that section perhaps wasn't as good as it should have been. So it's never been a surprise. I

think if it had been a surprise and then they'd have said 'right, you need to go and learn some more about this', I think depending on how it was delivered, it may have been a bit sensitive but no, I've never really been surprised by it to be honest. So it's always kind of been a welcome discussion because it's something I've known that I can definitely improve on. [I02].

The feedback mechanism referred to by interviewees seems to be formative feedback following assessment; in fact submission of draft work for formative feedback was not discussed by any students during the interviews. The strand 1 data highlighted feedback mechanisms as key opportunities to help students develop their academic skills, but it is evident from interviewees' responses that the articulation and delivery of feedback is extremely important, with a clear need for sensitivity when communicating negative feedback. Closer inspection of interviewees' responses about their satisfaction with feedback mechanisms in strand 1 are quite varied (*Table 5.3*). I01 exhibited generally positive responses to both opportunities for feedback on each occasion he completed the questionnaire. I03, on the other hand, expressed dissatisfaction with formative feedback following assessment. Unfortunately this was not explored during the interview because responses to strand 1 were not scrutinised prior to the interview, thus it is impossible to determine what led to this level of dissatisfaction. This will be raised in chapter 7 when discussing the limitations of this study.

	Submission of draft work for formative feedback	Formative feedback following assessment
Interviewee 01	Completely satisfied / Very satisfied	Very satisfied / Slightly satisfied
Interviewee 02	Very satisfied	Very satisfied
Interviewee 03	Moderately satisfied	Not at all satisfied
Interviewee 04	Completely satisfied	Completely satisfied
Interviewee 05	Very satisfied	Very satisfied

Table 5.3: Interviewee satisfaction with feedback mechanisms

Communication is an important facet of ODL and written communication in particular has the potential to impact on many aspects of the students' experience and thus will be discussed further in chapter 6.

Question 10: In what ways have the various academic skill development opportunities you have used contributed to your academic development?

All students were unanimous in a positive response to this question, with I03 commenting: "I would say they've contributed quite a large amount". I03 specifically identified the library as a useful resource, although her explanation related to use on

campus with access to hardcopy books, use of the study areas and the opportunity to book rooms for students to practice role play following their lectures before returning to clinical practice. Interestingly, the skills students developed were fairly wide ranging, but importantly students were able to apply them to their work and personal lives:

...no absolutely they have and without that I wouldn't be where I am now. For me the most important thing has been managing that information and storing that information in a format on the computer.
[101].

I've definitely seen an improvement in my development so the main one for me really has been literature reviews. I feel I'm quite an academic person naturally so I don't find writing and being critical and things like that a problem. But for me it was the literature review that really stumped me....A lot of it when I think back was the fundamentals that you were taught and kind of the initial context of it that I've kept in my mind and the more I've applied them the better grades that I've got relative to my literature review. [102].

...certainly, reflective practice, I think that's a marvellous thing to learn about. Critical thinking as well. So I do intend to continue with those techniques. Reflection, very powerful when used. So absolutely would intend to take those on into my both professional and personal life as well. [104].

I feel a completely different person to the one who started three years ago, and I would say that the overriding thing is confidence. I think that what those skills have given me is the confidence to know that the work I'm producing and everything I do actually is credible I guess, and following the right path. And I suppose a big thing for me is that I now feel as good as everybody else. I've now got so much more confidence in myself that what I'm doing is right I suppose, and I never really understood before the value.

I never actually knew what an academic journal was. I relied on a narrow range of sources for my research so now I understand what an academic journal is and the value of it and that whatever the subject is you're likely to find some research on it somewhere and how to find it, how to make sure it's credible, how to read into the data that they're using, looking at sources that are constantly coming up, that I've been able to work out who the authors are that I should probably be going to

first, so, so many sort of different things that overall have just built up my confidence. [I05].

The strand 1 data identified students' perception of the contribution various academic skill development opportunities made to their academic development, but it was extremely gratifying to listen to and observe interviewees in strand 2 positively express the impact of these opportunities. The skills and attributes students' gained from these academic skill development opportunities can be summarised as:

- Critical thinking skills
- Reflective practice
- Critical reading skills
- Critical review of literature
- Increased confidence
- Credibility in the workplace

Closer inspection of interviewees' strand 1 data is summarised in *Table 5.4*. I01 made duplicate responses to the strand 1 questionnaire and these are both tabulated, with the month of completion shown. There are discrepancies between some of his responses, but it is impossible to deduce the reasons for this since these were not discussed during strand 2. There had been an intention to explore these discrepancies during the interview, but the difficulties in sound quality resulted in a focus on trying to hear responses and therefore the need to clarify the strand 1 responses was overlooked. This oversight could be considered a limitation in the study, although verification was not sought for other participants' responses to strand 1, thus demonstrating consistency between all of the interviews. Had the opportunity been taken to follow up the discrepancies with I01, potential for the introduction of leading questions existed, something which Oppenheim (1992, p.74) considers feasible even for experienced interviewers when they are "under the stress and immediacy of a difficult interview". It also has to be recognised that discrepancies in responses over time are likely to occur with all participants. Marsden and Wright (2010) consider the psychology of questionnaire response, suggesting some respondents who use more effort in their responses adopt four stages: initial comprehension of questions; retrieval and organisation of what they understand is required of questions; evaluation and judgement of the accuracy of their answers; and finally they record answers which are carefully reasoned. In contrast, where respondents give less reasoned thought, responses may be more superficial and influenced by other factors such as wanting to be seen in a good light by the researcher. The discrepancies between I01's multiple responses do highlight a potential limitation in the use of questionnaires which may depend on a respondent's motivation at the time of completion (Marsden and Wright, 2010), although this could arguably be the case for any data collection method.

Table 5.4 has been colour-coded to highlight those opportunities which made a positive contribution to students' academic development in yellow, with negative contributions in blue. The remaining boxes are those which students' selected 'neither agree nor disagree', responses which convey a rather ambivalent voice about those academic skill development opportunities. It is pleasing to note that all students responded positively to some extent. I03's strand 1 responses were generally less positive than other students and during the interview she was somewhat less ebullient than the other interviewees who were keen to explain how the academic skill development opportunities they used had contributed to their development. Whilst it is not possible to interpret which academic skill development opportunities contribute to the various skills and attributes students gained, *Table 5.4* helps identify those opportunities which students feel less positive about and which, by deduction, contribute least in terms of academic development. Student services tutorials and Adobe Connect tutorials were viewed negatively in terms of contribution to students' academic development, although review of interviewees' strand 1 responses revealed that Adobe Connect tutorials were not available to them. Similarly, interviewees gave mixed responses about the availability of student services tutorials. It is difficult to decipher if their ambivalence about the contribution these academic skill development opportunities make to their academic development is because they are unavailable and have not been used, or if they generally do not meet students' needs. I03 had used a student services tutorial and neither agreed nor disagreed that this had contributed to her academic development.

It is evident from data in both strands that students have preferences for the academic skill development opportunities they used. Analysis seems to suggest that those opportunities do contribute to students' academic development and this will be discussed further in chapter 6.

Level of interaction	Academic skill development opportunities	Interviewees' perception of the contribution made by academic skill development opportunities to their academic development (from strand 1)					
		I01 (Feb 2015)	I01 (March 2015)	I02	I03	I04	I05
No interaction	Library online guides	Neither agree nor disagree	Agree	Neither agree nor disagree	Neither agree nor disagree	Agree	Strongly agree
	Student services online guides	Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Disagree	Neither agree nor disagree
	Videos	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Neither agree nor disagree
	Internet	Strongly agree	Strongly agree	Agree	Neither agree nor disagree	Strongly agree	Neither agree nor disagree
One to one interaction	Librarian support	Neither agree nor disagree	Strongly agree	Neither agree nor disagree	Strongly agree	Strongly agree	Strongly agree
	IT helpdesk	Neither agree nor disagree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Agree
	email contact with tutors	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
	Submitting draft work for formative feedback	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree
	Formative feedback following assessment	Neither agree nor disagree	Strongly agree	Strongly agree	Neither agree nor disagree	Strongly agree	Strongly agree
	Telephone tutorials with tutors	Strongly agree	Strongly agree	Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Strongly agree
	Online chat eg: Skype	Strongly agree	Strongly agree	Neither agree nor disagree	Neither agree nor disagree	Strongly agree	Strongly agree
Group interaction	Student services tutorials	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Neither agree nor disagree
	VLE discussion forum	Strongly agree	Agree	Agree	Neither agree nor disagree	Strongly agree	Strongly agree
	Adobe Connect tutorials	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Neither agree nor disagree

Table 5.4: Contribution to interviewees' academic development (strand 1)

Question 11: Can you think of any other academic skill development opportunities which might improve the student experience for distance learning students?

The literature suggests most universities provide remedial support which is offered in extra-curricular skill centres and is facilitated by support staff as opposed to being course specific and delivered by tutors. Having gained an understanding during the interviews about students' perceptions of the quality of their academic skill development opportunities, this question sought students' opinions regarding what *they* think would facilitate students' development of their academic skills. Students' suggestions followed two distinct areas:

- There should be standardisation in the format and delivery of information
- There is a need for more interactive approaches to ODL teaching and learning

As for standardising information, this in itself encompasses various aspects of the student journey and not just academic skill development. For example, I01 referred to the fact that from the point of application: "Information all comes in dribs and drabs from different departments and in different formats either by email and lots of other ways....It's a very daunting task because when you want information you want it quickly....". During the interview with I04 he explained that his job role is in information technology and he frequently works at home, thus he did not suffer any feelings of isolation expressed by other students. However, even though he is confident in the use of technology, he very specifically talked about the need for standardisation of VLE sites because there was a:

...lack of consistency between the two modules I did as to how things were done, how things were presented. Each tutor seemed to take their own approach which wasn't always possible. So for the module itself, where do I look in the VLE, what sort of information am I going to see and what sort of format. So for the one it was very clear and for the other you had to go looking around a bit more and it was in different places and different formats, some of it was in the VLE and just to be very consistent across the board as to how things are presented. I don't know if that's because the tutors have their own free rein as to how they present their courses, but certainly finding a standardised pack of learning those generalised skills would be a good idea. [I04].

For several students the 'human' aspect of their learning was extremely important. It was therefore perhaps unsurprising that they suggested more interactive strategies to facilitate engagement for ODL students. Even I04, who was confident in IT, suggested

academic skills should be delivered on campus to all students:

...the more general things like the academic skills should be a standard workshop or whatever it's called, the whole university so that okay, you want to learn about the library, therefore you go, probably to a tutorial in the library...[I04].

This, of course, contradicts the literature which advocates the use of contextualised rather than generic skill support sessions. Other students suggested 'live' videos, not merely audio slides, but where a tutor is seen delivering a teaching or training session, such as recording campus-based sessions that can be uploaded to a VLE site, or online conferencing for group or individual tutorials:

...A webinar or teleconference and Webex or some kind of online version of the face to face sessions, just where there's somebody on there, whether it was once a month or once a year or whether the tutor conducting the course or the module that you're currently in, says "Right, I'm going to be doing two webinars. If you can't make one make the other and this is what we're going to be going through". Just to give you that interaction of being able to listen to somebody explain something rather than just reading a document and then having to ask questions....But for me that sounds like something that could be really helpful. [I02].

...An opportunity like some sort of webinar, if you were having an issue you could log into something and ask someone questions, maybe different people available at different times, that sort of thing...I appreciate there can't be someone sitting at the end of a camera all day but the live chat aspects you have via the internet and even things like that - some sort of messenger thing would be quite helpful. [I03].

I don't know whether they could set a lot of the work up on YouTube so that the distance learning students could actually perhaps watch a class in action. Just much more human interaction I think, just listening to the problems. I think sometimes listening to problems that other students have really helps you. And on one of the distance learning modules in the second year the tutor was really good at group Skype calls, so although they were actually really difficult because a couple of the students have very poor English..., so it was quite challenging trying to have us all talking sort of at once, I got a lot out of those sorts of sessions. I think mini videos, a mini film that you can watch, stuff on YouTube. I just think hearing people saying things rather than just

reading all the time, breaks up and perhaps could emphasise the major points. [I05].

The ideas and suggestions proposed by the interviewees are inexpensive and use technologies already available within the university. It is evident from interviewees' responses to this question that although they are confident in using the VLE and other electronic systems, variation between these systems and differences in module VLE sites presents ODL students with challenges which all impact on their time. Providing opportunities for 'human' interaction would be welcomed by students and these issues will be discussed further in chapter 6.

5.2 Chapter summary

This chapter presented the results from five strand 2 online, audio-visual, semi-structured interviews which were facilitated using Adobe Connect. Results were organised according to the interview questions so that students' voices might be heard regarding their perception of the academic skill development opportunities they used during their studies and the contribution those opportunities made to their academic development. Extensive samples of quotations were included so that the reader can be confident in the accurate representation of students' ideas and opinions.

Braun and Clarke's (2006) framework for thematic analysis (section 3.4.2 in Chapter 3) was used to define themes and sub-themes and to determine a coding system to facilitate analysis of the data. Anonymity of interviewees was maintained throughout this chapter via the use of the pseudonym 'Interviewee' and a number between 01 and 05 eg: Interviewee 01 (I01).

A variety of findings emerged from the results which can be summarised as follows:

- QUAL Finding 1: Students use academic skill development opportunities when preparing for assessment.
- QUAL Finding 2: Inclusion or embedding of academic skill development opportunities within modules appears to be rather sporadic.
- QUAL Finding 3: Students use academic skill development opportunities for personal development.
- QUAL Finding 4: Students perceive benefit in accessing opportunities for 'human' interaction, whether that is face to face or using virtual methods.
- QUAL Finding 5: Academic skill development opportunities make a positive contribution to students' academic and personal development.

The next chapter presents the integrated findings from strand 1 and strand 2.

Chapter 6 Discussion and integration of the QUAN and QUAL findings

This study seeks to identify academic skill development opportunities available to distance learning students at the Higher Education Institution (HEI) in which I am employed. Importantly, the study also aims to explore students' perception of the contribution these opportunities make to their academic development. This research study used a sequential QUAN→QUAL mixed methods approach and participants were invited from students registered to start online distance learning (ODL) courses at the HEI in which I am employed in September 2013/14. The sequential QUAN→QUAL methodological approach enabled the quantitative and qualitative strands to be conducted and analysed separately, thus allowing key findings to be drawn from the separate strands. On completion of the data analysis for each strand it became evident that some of the results converged and supported each other. Therefore, although the sequential nature of this study conveys an idea of linearity, interaction took place *between* the two strands (*Figure 3.2*) to discover where similarities and differences occurred. Integrating the QUAN and QUAL data in this way promoted the drawing of meta-inferences relating to whether the QUAL strand provided a better understanding of the research problem than the QUAN strand alone (Creswell and Plano Clark, 2011). These opportunities for integration will be discussed during this chapter, together with the challenges of the study which ensued and the steps taken to manage them.

Quantitative data were collected in strand 1 (n=43) via an online questionnaire using Survey Monkey. The aim of the online questionnaire (section 3.3.1) was to gain an understanding of the academic skill development opportunities available to ODL students at the HEI at which I work, and students' perception of the contribution these opportunities made to their academic development and in meeting their needs and expectations. A pilot of strand 1 (n=6) enabled the testing of the online questionnaire as a data collection tool and results of the pilot were presented in chapter 3. Descriptive statistics in the form of charts and frequency tables for strand 1 were presented in chapter 4, as well as inferential statistical techniques using the cross-tabulation chi-square test. In chapter 4 the results of the pilot and strand 1 were also compared to explore similarities or differences in the data. Analysis of the quantitative data and performance of these statistical tests led to the emergence of six key findings which are presented in *Table 6.1*.

Qualitative data were collected in strand 2 (n=5) via online, audio-visual, semi-structured interviews using Adobe Connect (section 3.3.4). The interviews were used to facilitate the gathering of rich data from geographically remote students. Open questions during the interviews were the primary mechanism by which rich data were

collected; providing opportunity for clarification of responses in strand 1 and utilising an exploratory approach to understand participants' perception of the academic skill development opportunities they used. Data were presented in chapter 5 as a narrative to promote and project students' voices. Braun and Clarke's (2006) framework for thematic analysis was utilised to generate codes, themes and sub-themes derived from the key concepts identified by the conceptual framework (*Figure 2.1*). In chapter 5 the results of strand 1 were also compared to explore similarities or differences in the data. Analysis of the qualitative data led to the emergence of five key findings which are presented in *Table 6.1*.

Research question	Finding number	Description of finding
1	QUAN Finding 1	Various academic skill development opportunities are available to students
1	QUAN Finding 2	Students perceive librarian support is not available to them
2	QUAN Finding 3	Students choose to use internet resources as a means of academic skill development in preference to the university generic online materials
2	QUAN Finding 4	Students use academic skill development opportunities where there is personal one to one interaction in preference to generic group interactions
4	QUAN Finding 5	Students use academic skill development opportunities for personal development
5	QUAN Finding 6	The internet and academic skill development opportunities where there is 'human' interaction contribute to students' academic and personal development
3	QUAL Finding 1	Students use academic skill development opportunities when preparing for assessment
3	QUAL Finding 2	Inclusion or embedding of academic skill development opportunities within modules appears to be rather sporadic
4	QUAL Finding 3	Students use academic skill development opportunities for personal development
5	QUAL Finding 4	Students perceive benefit in accessing opportunities for 'human' interaction, whether that is face to face or using virtual methods
5	QUAN Finding 5	Academic skill development opportunities make a positive contribution to students' academic and personal development

Table 6.1: Findings from QUAL and QUAN data

The study was based on the following research questions:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?

5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

These five research questions were satisfied by the findings presented in chapters 4 and 5. Overall the quantitative and qualitative data revealed that students used a variety of academic skill development opportunities, but they expressed preferences for those with opportunity for personal one to one interactions with a tutor or support staff. Generally speaking students showed lower levels of satisfaction with the generic academic skill development opportunities provided by the university, with the exception of the Harvard Referencing Guide. Students' somewhat negative perceptions of the university generic academic skill development opportunities were twofold: they either did not meet their needs or students perceived them to be unavailable for ODL students. This perception may have contributed to students' predominant use of the internet for academic skill development opportunities.

This chapter analyses, interprets and synthesises the integrated findings from strands 1 and 2. The research study has been steered by the research questions and conceptual framework, the key concepts of the conceptual framework being: skill support required; reasons for accessing skill support; timing and trigger points; quality of learning experience; skill development opportunities provided by the HEI. During this chapter, consideration will be given to the contribution made by this research study to the existing framework (*Figure 2.1*). The chapter is organised by the following analytic categories:

- Availability of academic skill development opportunities (*Research Question 1*)
- Students' preferences for academic skill development opportunities (*Research Question 2*)
- Reasons students utilise academic skill development opportunities (*Research Questions 3 and 4*)
- Contribution to learning (*Research Question 5*)

These categories formed the basis of the questions for the online questionnaire (*Appendix 5*) in strand 1, as well as the framework of the coding scheme (*Appendix 11*) used to analyse the qualitative data in strand 2. The categories are directly aligned to the research questions and thus this chapter will facilitate the answering of the research questions. The discussion takes into consideration the literature relating to academic skill development for higher education students, with a specific focus on the needs of students who study remotely from the university. The implications of this research study's findings will augment current understanding of ODL students' perceptions about opportunities for academic skill development, thereby contributing to

the existing body of knowledge. The chapter concludes with a re-examination of the researcher's assumptions outlined in chapter 1, with consideration for the implications of researcher bias in interpreting the findings.

6.1 Availability of academic skill development opportunities

In seeking to establish the academic skill development opportunities available to ODL students, findings from the analysis of the pilot and strand 1 data showed that a variety of opportunities were available to support students' academic skill development. In particular, pilot respondents were unanimous about the availability of interactive opportunities such as email contact with their tutors, formative feedback following assessment and VLE discussions. Strand 1 respondents indicated similar views to the pilot in their responses about email contact with tutors (97.6%, n=42), formative feedback following assessment (90.5%, n=42) and the VLE discussion area (97.7%, n=43). Strand 1 respondents also highlighted the availability of submitting draft work for formative feedback (97.7%, n=43). Virtually all students were aware of the availability of internet resources for academic skill development opportunities.

Although students were aware of the availability of a variety of opportunities to facilitate their academic skill development, analysis of the pilot and strand 1 data indicated that communication strategies for making students aware of these opportunities were ineffective. This was illustrated particularly well by the pilot data which showed a range of students' views about the availability of a number of academic skill development opportunities. For example, librarian support, student services tutorials, telephone tutorials with tutors and online chat with tutors all demonstrated 'yes', 'no' and 'don't know' responses. Since the pilot participants were all drawn from the same Masters' level course, this would seem to indicate the lack of a clear strategy within the course for informing students about the academic skill development opportunities available to them. However, since weaker students are more reticent at seeking support (Simpson, 2008), it might be reasonable to assume that in the absence of a clear strategy only the most academically capable or proactive students explored the resources available to them. This finding from the pilot data was corroborated by the strand 1 data which also showed mixed responses for all of the opportunities listed on the questionnaire. Thus it would appear that communication strategies to inform students about academic skill development opportunities were not just lacking for the pilot participants, but strand 1 participants too.

In chapter 4 comparison was made of the strand 1 data between the academic skill development opportunities available to students and those they utilised (*Table 4.1*), revealing considerable variation in some areas. Of particular note was the difference

between students' awareness of the availability (n=35) and use (n=19) of student services online guides, as well as the availability of student services tutorials (n=22) and their use (n=9). It is impossible to establish the reasons why students did not utilise these particular academic skill development opportunities purely from the strand 1 data. Clarification was sought during the strand 2 interviews when three participants confirmed their attendance at student service tutorials, but these were students for whom their course involved some form of campus-based attendance. Although some students may have made a conscious choice not to utilise student services tutorials, it is feasible that for other students these tutorials are perceived to not be available to ODL students. A key finding of the QUAN data highlighted that ODL students perceive librarian support is not available to them. In the pilot, three out of six of the respondents recorded negative responses ('no' or 'don't know') to the availability of librarian support. This was reinforced by 31.7% (n=13) of respondents in strand 1 who indicated the same negative response.

Some corroboration in a lack of clear strategy for directing students to academic skill development opportunities was evident during the strand 2 interviews by I01 who expressed frustration at the "trial and error" manner in which he had found out about the academic skill development opportunities available to him. This frustration seemed primarily borne from concerns about time management. However, the other strand 2 participants' experiences in being directed to academic skill development opportunities seemed more positive, although Simpson (2009) refers to the ad hoc or 'goulash approach' by which tools developed for distance learning students are applied. Instead, Simpson (2008; 2009; 2012) is very much an advocate of proactive tutor contact with all students, thus negating the ad hoc nature by which students might access opportunities for support and promoting the use of a more effective 'just in time' and personalised approach. Shillington, et al. (2012) are also of the opinion that simply putting together a suite of online learning resources is insufficient and that a proactive role has to be maintained to link students to resources at specific points in their learning. Not only has this research study revealed the suite of online resources provided by the university do not fully meet the needs of ODL students, a key finding of the QUAL data identified that explicit linkage appears to be sporadic. That said, the strand 2 data highlighted that students do not necessarily access academic skill development opportunities when they *are* explicitly directed to resources by tutors, resorting instead to reactive approaches for developing their skills.

Existing research specifically identifies the need for writing skills to be embedded in course curricula, particularly for students making the transition to higher education (Wingate, 2006; Clughen and Connell, 2011; Arndell, et al., 2013). In strand 1, 21

students indicated they had used academic skill development opportunities because they were included within a module, although only 48.8% of students responded to that question. It is impossible to establish if students' non-response to this question implies academic skill development opportunities are not included in modules. A non-response may simply indicate that students had no recollection of academic skill development opportunities being embedded within modules, thereby highlighting a potential limitation in the study in seeking students' retrospective opinions. It is also feasible that embedding of academic skill development opportunities *does* occur, but that students did not recognise this as a distinct set of skills and it was merely part of the module content. However, findings from this research study do highlight a lack of explicit direction of ODL students to the academic skill development opportunities available to them, thus adding to the existing literature which endorses the need for effective communication between tutors and ODL students (Price, Richardson and Jelfs, 2007). In light of the evidence from the integration of the QUAN and QUAL data, the 'timing and trigger points' aspect of the conceptual framework does not appear to be sufficiently explicit. This category of the conceptual framework will therefore be edited to highlight the importance of embedding academic skill development opportunities on a 'just in time' basis.

The 'don't know' responses in the QUAN data are of particular concern and would seem to indicate that students have neither been informed about academic skill development opportunities, nor have they proactively sought help to find out what is available to them within the university. It would be interesting to explore whether this group of students fall into the category of 'weaker' students referred to by Simpson (2008; 2012) whereby they need help and support but do not actively seek it, but this is outside the scope of this research study. Alternatively the 'don't know' responses may be because students did not perceive a need for academic skill development, or that they took the initiative to gain skill information from other sources, such as the internet, which appears to be a key resource for students. Results from the pilot and strand 1 data highlighted the importance of the internet to students, with 100% (pilot) and 98% (strand 1) of students indicating that internet resources were available to them.

In chapter 4 consideration was given to whether Masters' level students are more self-directed and skilled in sourcing reliable internet resources, whereas the same may not be true of Foundation Degree students who made up the 41.5% (n=17) of respondents who used the internet as a source of academic skill development. Arndell, et al. (2013) specifically identify the ability to evaluate resources for scholarly merit as one of two key skills required in the first term of undergraduate level study. However, when asked in strand 1 if internet searching is an 'academic skill', 27.9% (n=12) of respondents

indicated 'no'. Analysis of these results in chapter 4 revealed that 91.7% (n=11) of Masters' Degree students viewed internet searching as an academic skill, compared to 30.0% (n=6) of Foundation Degree and 45.5% (n=5) of Bachelor Degree students who did not. This would seem to imply that Masters' Degree students understand the ramifications of searching for and utilising internet resources, whereas undergraduate students may not, thereby corroborating the views of Arndell, et al. (2013). The findings from this research study would therefore seem to suggest that although ODL students are aware of internet resources to facilitate the development of their academic skills, undergraduate students should be given explicit direction to robust internet resources and training to ensure they are skilled in evaluating resources for scholarly merit.

This research study has demonstrated variance in students' understanding about the availability of academic skill development opportunities and this may be indicative that academic skill development is not widely or routinely embedded within course design. Since the inception of this research study a suite of online resources have been developed at the HEI at which I am employed. Although tutors are encouraged to direct students to these resources, there is no explicit strategy to promote the embedding of specific resources at timely stages within curricula. This finding is supported by Jones and Thomas (2006) who argue that post 1992 universities in particular have made little change to traditional 3 year courses in terms of skill support, relying instead on 'bolt on' services (Bennett, Dunne and Carré, 2000). Although there was evidence from the strand 2 qualitative interviews to suggest some modules include relevant skill development for an assignment, this appeared to be on an ad hoc basis for isolated modules and not a strategy employed across entire course curricula. 'Skill development opportunities provided by the HEI' are one element of the conceptual framework for this study. Following this integration of the QUAN and QUAL data, the evidence suggests this remains a key aspect of academic skill development for students and thus this will remain part of the conceptual framework in this format.

To summarise, the main considerations in the availability of academic skill development opportunities for ODL students are:

- Communication strategies utilised by tutors to inform students about the opportunities available to them
- Explicit direction to the academic skill development opportunities available to them.

6.2 Students' preferences for academic skill development opportunities

Having established the academic skill development opportunities available to ODL students, the next step was to explore which opportunities students utilised and thereby to establish if they showed preferences for specific opportunities. Findings from the pilot, strand 1 and strand 2 data suggest that students used a variety of opportunities for skill development, although some clear preferences were demonstrated. All respondents to the pilot utilised email contact with tutors, feedback following formative assessment, the VLE discussion forum and internet resources. No students took the opportunity for telephone tutorials with tutors, even though three of the six respondents were aware these were available. This is surprising given the importance of 'human' interaction emphasised by the strand 2 participants. In strand 1, similarity with the pilot data was seen, with 100% of respondents indicating they used email contact with tutors as an opportunity for academic skill development. Formative feedback on draft work and following assessment were also highlighted in strand 1 as key opportunities for skill development, although worryingly, three respondents claimed they 'don't know' about formative feedback following assessment. It was impossible to clarify this response and rather than indicating they 'don't know' about formative feedback following assessment per se, their response may indicate that they do not perceive feedback as offering an opportunity for skill development. This would be an interesting area for further research. Students' use of feedback following assessment is an important consideration since Wingate (2010) suggests there may be discrepancies between the message a tutor intends to convey and the perception of the student. Walker (2009) concurs with this view, but also claims students may not understand the feedback. In addition to this, Wingate (2010) identified that low achieving students tend not to engage with feedback. Written feedback is a concern for all tutors, but especially so for ODL tutors who do not have (or make) the opportunity for any form of 'human' interaction such as tutorials via telephone or online video messaging. This research study therefore extends the current body of knowledge by conveying the ODL students' voice on the importance of formative feedback following assessment, specifically with respect to feeding forward to promote development of skills in future assignments.

Students identified internet resources as being available to them, but importantly, findings suggest students utilised internet resources as a means of academic skill development in preference to university generic online materials. This is supported by the pilot (100%, n=6) and strand 1 data which showed 90% (n=37) of students utilised the internet. This is significantly higher than the number of students accessing resources provided by the university, such as text-based study guides and videos. As a result of this observation, a cross-tabulation table was created (*Appendix 17*) to establish whether students at a particular level of study held a preference for accessing

internet resources. This test showed that students studying at Foundation level accessed internet resources more than students at Bachelor or Masters' level study. This result may be of concern if students are insufficiently skilled in selecting robust resources as mentioned in section 6.1, and furthermore, if this skill is not explicitly taught via module materials. However, results of the strand 1 data in chapter 4 indicated high levels of students' satisfaction with internet resources (*Appendix 13*), with median and mode responses of 'very satisfied'. Equally, strand 1 results showed median and mode responses of 'strongly agree' for the contribution of internet resources to students' academic development (*Appendix 14*). It is impossible to decipher whether researcher concerns about students' skill in searching for robust internet resources are unfounded, or whether these high levels of satisfaction relate to re-useable learning objects (RLO) embedded within course materials, since 21 students in strand 1 indicated they used internet resources because they were included as part of a module (*Table 4.8*). If this is the case, further research would be helpful to explore these RLOs and establish whether they represent good practice which could be disseminated across the university.

The strand 2 data showed that whilst students utilised some of the university generic resources, in particular the online study guides for referencing, literature reviews and critical writing, students did not find these predominantly text-based resources easy to use. Several students commented during the qualitative interviews that searching for information in the online guides was time consuming. One interviewee said: *"When you're sitting on your own at home the thought of ploughing through various things trying to find what you're looking for and never quite finding what you're looking for. I think in the end you just sort of find your own ways of doing things."* For those students who were geographically close to the university, they appeared to access the online guides as a first step, but they would then access 'human' support (either via email or on campus), such as the librarians, if their questions were unanswered by the guides or they needed further help. For example one student commented: *"I just couldn't get my head around the concept of it [literature review] so after having read the guide....I popped along"*. Another said: *"I remember particularly struggling with finding how to reference a piece of legislation...I actually went to a one-off session on Harvard Referencing that the university was doing"*. The strand 2 data revealed that for those students who are geographically close to the campus, or where there is a requirement for some sort of attendance, engagement in campus-based academic skill workshops or tutorials is utilised, although results in chapter 4 showed that group interactions were utilised least (*Table 4.4*). Although distance learning has features which are attractive to students, not least the logistical flexibility it affords (Duranton and Mason, 2012), findings from this research study indicate students nonetheless exhibit a preference for

personal one to one interaction with tutors. Whilst this might be construed as ODL students' dependency, tutors are considered to be an important determinant in the quality of ODL students' experiences (Dearnley, 2003; Tsinidou, Gerogiannis and Fitsilis, 2010). In particular, Kuo, et al. (2013) emphasise the significant contribution to student satisfaction from student-tutor interaction in online learning and Lehman and Conceicao (2014) specifically comment on the high value ODL students place on interaction with tutors. In my opinion students' preference for personal one to one interaction with tutors is not a reflection of their dependency, but may be a result of ODL tutors encouraging dialogue since this helps minimise isolation, promotes engagement (Salmon, 2004), motivation (Simpson, 2012) and influences students' perception in the quality of support (Kuo, et al., 2013). The overwhelming finding from the pilot, strand 1 and strand 2 is students' preferred choice for academic skill development utilising opportunities for personal one to one interaction with tutors. This is a significant contribution to the existing literature in so much as students' preferences for various academic skill development opportunities have not previously been sought.

Analysis of the strand 1 data revealed that one respondent (R34) 'always' used student services tutorials; this was in contrast to 'often' or 'sometimes' using the academic skill development opportunities for one to one interaction with tutors more commonly utilised by other students. In chapter 4 the deduction was made that R34 may have been geographically close to the university and therefore able to take advantage of the campus-based facilities. Having explored the university website the initial impression is that tutorials are widely available, but closer inspection reveals these are campus-based, thus confirming R34's proximity to the university. It is interesting that R34 made a deliberate choice to attend these campus-based sessions, but investigation of R34's strand 1 responses show they utilised all of the academic skill development opportunities available to them. In fact R34's responses convey a very positive learning experience in which they 'strongly agree' all academic skill development opportunities made a positive contribution to their academic development.

Students' use of internet resources is perhaps indicative that university generic academic skill support opportunities are not designed with ODL students in mind. This is supported by the work of Gamache (2002) and Wingate (2007) who suggest learning has to be contextualised, something that cannot be achieved in generic support centres. One student reaffirmed this point during her strand 2 interview when, having attended a campus-based referencing workshop, she said: *"But it was too basic....so it was only really covering the easy bits, and what I was looking for was the more difficult questions that you have"*. Learning also needs to be contextualised to individual students' needs, something which Ehlers (2004), Simpson (2008) and Shillington, et al.

(2012) claim does not occur since HEIs tend to develop tools without matching them to diverse students' needs. This research study extends the current body of literature by conveying the voice of ODL students who have clearly indicated their needs are not fully met by generic skill development opportunities. That said, I would question how HEIs can logistically and effectively achieve an individualised approach at an institutional level, although it should be possible at a course or modular level. Lentell (2012) advocates contextualising policies with sub-processes for distance learning which, she suggests, ensures parity of learning outcomes, experience and qualifications. This research study corroborates the work of Lentell (2012) by demonstrating the need for institutional policies which support ODL tutors in delivering individualised skill support, thus facilitating a consistent approach across ODL courses.

Results of the strand 1 data in chapter 4 reported the VLE discussion forum was used by 92.7% (n=38) of respondents. *Table 4.8* shows students mainly used the VLE discussion forum for personal development, but 21 students also indicated their use was because it was included as part of a module. Although the VLE discussion forum was the predominant academic skill development opportunity involving group interaction, results in chapter 4 concluded that it did not appear to be used as a faculty wide academic skill development opportunity. However, it may well be used at course level in some faculties to facilitate activities for academic skill development, although results in *Table 4.8* would seem to suggest activities are formative but not linked to assessment since not all students participate. Nonetheless, median and mode responses showed students were 'very satisfied' (*Appendix 13*) with the VLE discussion forum and 'strongly agree' (*Appendix 14*) about it making a contribution to their academic development. On this basis it would seem prudent to explore tutors' use of the VLE discussion forum in greater detail, thereby ensuring good practice is disseminated throughout the institution. Salmon (2004) and Duranton and Mason (2012) advocate peer interaction in the online environment since this helps minimise isolation and promotes confidence and willingness of students to collaborate, share their work or undertake peer review activities. However, engagement of all students in formative online activities is essential since non-engagement impacts on the group. This was highlighted in strand 2 by I04 who explained "*the cohort suffered as a whole to a certain extent because of the fewer numbers who were involved actively in the discussions*". Review of the literature highlighted technology and online learning environments as a key determinant in the quality of students' experiences (Sarsa and Soler, 2012; Udo, Bagchi and Kirs, 2011), yet existing literature does not comment on the use of the online environment for facilitating students' academic skill development, thus this research study extends the current body of knowledge in this field.

In summary, ODL students' preferences for academic skill development opportunities include:

- Those opportunities providing personal one to one interaction with tutors
- Opportunities for 'human' interaction, either face to face or using asynchronous methods
- Use of internet resources in preference to university generic skill development opportunities

6.3 Reasons students utilise academic skill development opportunities

In the previous section students' preferences for academic skill development opportunities were identified. The next task was to establish students' reasons for engaging with academic skill development opportunities. Therefore, respondents to the online questionnaire were provided with the following list of reasons from which they were able to select multiple responses:

- To improve my grades
- To become more confident writing assignments
- To help me manage my studies better
- My tutor suggested it
- I failed an assignment
- They are included as part of a module

In chapter 4 these reasons for students utilising academic skill development opportunities were categorised as personal development (PD), tutor initiated (TI) or in the case of 'I failed an assignment', PD or TI. Both the pilot and strand 1 data highlighted similar findings (*Table 6.2*), with personal development appearing to be the predominant reason for students utilising academic skill development opportunities.

	Category	Pilot (n=6)	Strand 1 (n=41)
To improve my grades	PD	3	33
To become more confident writing my assignments	PD	6	32
To help me manage my studies better	PD	4	23
My tutor suggested it	TI	1	12
I failed an assignment	PD/TI	0	3
They are included as part of a module	TI	5	21

Table 6.2: Reasons for students' use of academic skill development opportunities (pilot and strand 1)

These findings were confirmed by the strand 2 data which revealed students' proactive approach and their desire for personal development and success, with the exception of I04 who also displayed a more pragmatic stance towards achievement of the learning outcomes. I03 commented specifically on a need *"to further my knowledge"*, whereas other interviewees all reflected upon their response to formative feedback following assessment. Although I05 reflected upon her negative experience when receiving feedback about her referencing skills, the experience provided a catalyst to develop her referencing skills. It has to be acknowledged, however, that this may not have been the outcome for other students with lower levels of motivation or determination, highlighting once more the critical influence of tutors' written communication skills. Wingate (2010) refers to the importance of a balance between negative and positive comments in feedback, particularly for students with low self-efficacy and motivation. I05 referred to a variety of negative experiences during the strand 2 interview, yet remained extremely motivated and determined to succeed, an attitude which seems to confirm the view that motivation is key to students' success (Chen and Jang, 2010; Simpson, 2012).

The pilot and strand 1 findings revealed students utilised academic skill development opportunities for a variety of reasons. Five of the pilot respondents indicated academic skill development opportunities were 'included as part of a module'. Whilst this is encouraging, it is also rather surprising this option did not receive a 100% response since pilot respondents were invited from the same Masters' level course. In strand 1 21 students responded that academic skill development opportunities were 'included as part of a module'. It is encouraging that academic skill development opportunities appear to be embedded within modules, but it is important to note the response to this question was only represented by 48.8% of respondents, a point discussed in section 6.1. However, a key finding from the strand 2 data identified that embedding of academic skill development opportunities does occur, although it is rather sporadic without an apparent strategy at course or faculty level. Wingate, Andon and Cogo (2011) suggest ways in which academic writing instruction can be embedded into class-based teaching without impacting on content. Interestingly their methods were evaluated positively by tutors and students, although they highlighted the increase in tutor workload in providing feedback affected feasibility. Jacobs, Winnard and Elliott (2014) also comment on the impact of tutor workload in providing feedback to ODL students' on their draft work. These opportunities for good practice impact positively on the student experience, with potentially wider reaching effect on module/course evaluation and student retention, but from an HEI perspective the impact of tutor workload has to be taken into consideration. Although embedding of academic skill development is endorsed by the literature, perhaps the resource implications are a

significant reason why the embedding approach is rarely taken at UK universities (Wingate, Andon and Cogo, 2011).

In light of the strand 1 and strand 2 data indicating academic skill development opportunities were embedded, albeit on an ad hoc basis, consideration has been given in this study that students may not recognise opportunities for academic skill development in modules. Several students in strand 2 referred to modules or teaching sessions (campus-based) where writing skills had been taught, although it was only on reflection during the interview that they assimilated this as having been ‘taught’ those skills. Results from this research study suggest academic skill development opportunities *are* widely available to ODL students, but are not necessarily embedded or made explicit. In section 6.2 the suggestion was made that generic university skill development opportunities do not fully meet ODL students’ needs, which may account for tutors’ limited use of embedding within curricula. Limitations in tutor time or ODL experience may also be a factor determining the embedding or explicit direction to individualised academic skill development opportunities. Time management was another skill facilitated by tutors, mainly in the form of discussions in the VLE, although the tutor-imposed timeframes inadvertently impacted on students’ experiences due to lack of engagement or participation by some students. The question has to be raised, therefore, as to whether skill development should be made more explicit, particularly since students exhibit aspirations for achievement and personal development. The literature is lacking in this respect, but since results from this study revealed the importance placed on academic skill development by students, the suggestion is made that academic skill development opportunities should be made explicit in module materials. In addition to this, the benefits of academic skill development opportunities should be highlighted to students in terms of the potential intellectual, practical, affective and transferable skills to be gained.

The pilot and strand 1 data indicated some students utilised academic skill development opportunities because ‘my tutor suggested it’. This was not corroborated by any of the interviewees in strand 2. Even though I05 was *“criticised because my referencing was poor”* she did not report being explicitly directed to skill support services; this was a proactive decision on her part. In strand 1, 12 students responded they had been directed to academic skill development opportunities by a tutor. Of these 12 respondents, R18 also reported failing an assignment yet still claimed to be ‘very satisfied’ with the academic skill development opportunities they had used. The literature suggests it is predominantly weaker students who are referred for skill support, but in the absence of students’ results it is impossible to establish the academic capabilities of students within this research study, although it is reasonable

to assume a range of abilities would be represented. It is interesting, therefore, that even though 12 students were directed to academic skill development opportunities by a tutor, they nonetheless failed to convey negativity in their responses. This would seem to contradict the literature which suggests student referral by tutors to skill support services can have a negative impact on students' experience (Wall, 2006; Simpson, 2008). This research study therefore adds to the existing literature by suggesting it is possible to sensitively direct students to skill support services without imposing negativity on the student experience.

The pilot and strand 1 data revealed students utilised academic skill development opportunities when preparing for assessment. Three pilot respondents and 33 strand 1 respondents reported they used academic skill development opportunities 'to improve my grades', with all pilot respondents and 32 strand 1 respondents indicating usage was 'to become more confident writing assignments'. This was reiterated to some extent by IO4 in strand 2 who, when asked his reasons for using academic skill development opportunities, commented: "I think it was always to achieve what was described in the learning outcomes". Although IO4's response conveys a somewhat pragmatic approach, it is evident from the pilot and strand 1 that students aspire to achieve high marks in assessment. It is therefore essential tutors provide opportunities to facilitate students' academic achievement. Where embedding or explicit direction to academic skill development opportunities does not occur, it could be argued that tutors are not promoting students' ability to achieve in assessment. Furthermore, if university generic online materials do not meet ODL students' needs, this not only creates additional challenges for students but potentially reduces their chance of achieving higher marks. This becomes a greater problem for weaker students who are more reticent at actively seeking help (Simpson, 2008). Simpson (2012) claims tutors hold a very important role in assessment and it is his view that assessment drives student dropout in distance education, an important factor for students and HEIs. This implies a fundamental need for tutors to provide opportunities to enhance students' performance in assessment. Formative assessment is one strategy which can contribute positively to students' success in assessment (Jacobs, Winnard and Elliott, 2014), although Simpson (2012) argues feedback on poor performance can lead to a deterioration in students' performance. Prymachuk, et al. (2012) also suggest feedback on formative activities must be timely, both in terms of the timeframe in which it is provided, but also the point in time at which students want feedback. In other words formative activities need to be scheduled to ensure students have time to edit their assessment, in light of feedback, prior to submission. Students also have a role to play in this process, since they have to take responsibility for reading and acting upon feedback (Wingate, 2010),

although as suggested in section 6.2, students may not perceive feedback as offering an opportunity for skill development.

Existing literature focusses on universities providing skill support to fill a gap in students' abilities, primarily with their writing skills (Arndell, et al., 2006; Wingate, 2007; Clughen and Connell, 2011). In contrast, this research study highlights students' desire and aspiration for personal success and achievement, thus adding to the current body of knowledge. It is difficult to establish whether students' reasons for utilising academic skill development opportunities are simply a motivator for achieving higher marks in assessment, or whether students aspire to something more holistic but equally motivational. In strand 2, I04 specifically referred to his personal need to gain skills he perceived his work colleagues exhibited who already held a degree: insightfulness, logical reasoning skills, reflectiveness and an ability to critique information. It would seem, therefore, that students who proactively engage in the academic skill development opportunities available to them not only seek to achieve high marks in assessment, but also wish to gain the intellectual, practical, affective and transferable skills a higher education qualification aims to deliver. 'Reasons for accessing skill support' are part of the conceptual framework for this research study. However, following integration of the QUAN and QUAL findings, students' aspiration for personal development appear to be a significant factor in their utilisation of academic skill development opportunities, thus the conceptual framework will be edited to reflect this.

In summary, ODL students reasons for utilising academic skill development opportunities include:

- Preparation for assessment
- Personal development, both in terms of students' aspiration for academic achievement as well as gaining transferrable skills for employment.

6.4 Contribution to learning

Having established the academic skill development opportunities available to ODL students, their preferences and the reasons they engage with those opportunities, the final part of the jigsaw lies in examining whether students perceive these opportunities making a positive contribution to their academic development.

The pilot and strand 1 data both suggested a strong contribution was made to students' academic development by email contact with tutors, submitting draft work for formative feedback, formative feedback following assessment, the VLE discussion forum and internet resources (*Table 6.3*). The pilot data revealed one student selected 'disagree' for email contact with tutors and submitting draft work for formative feedback, which

may represent this student's dissatisfaction with a particular tutor, module or assignment. Another student selected 'disagree' for formative feedback following assessment which may reflect their dissatisfaction with the content of the feedback or it was perceived to be unhelpful in enhancing their understanding or academic development. In view of the small number of pilot respondents it is impossible to draw any robust conclusions to these negative responses which were not reflected in the strand 1 data, where no negative responses were recorded for any academic skill development opportunity.

	Pilot (n=6)		Strand 1 (n=43)	
	Median	Mode	Median	Mode
Email contact with tutors	Agree	Agree	Strongly Agree	Strongly Agree
Submitting draft work for formative feedback	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree
Formative feedback following assessment	Agree	Agree	Strongly Agree	Strongly Agree
VLE discussion forum	Agree	Agree	Strongly Agree	Strongly Agree
Internet resources	Strongly Agree	Agree	Strongly Agree	Strongly Agree

Table 6.3: Academic skill development opportunities which make a positive contribution to students' academic development (pilot and strand 1)

It is evident from these results that students perceive benefit in accessing academic skill development opportunities where there is some form of 'human' interaction, whether that is face to face or using virtual methods. Importantly, in the case of email contact with tutors, submitting draft work for formative feedback and formative feedback following assessment, that 'human' contact would be students' tutors. The VLE discussion forum is frequently used by ODL tutors as the module 'classroom'; providing a central hub and means for communicating with the entire class. Clearly the VLE discussion forum includes participation with students' peers and helps minimise feelings of isolation which can exist with ODL, but the tutor facilitates the site and is key in moderating discussions. Sarsa and Soler (2012) suggest processes for supporting students' learning (primarily tutor guidance and motivation and student-teacher communication tools), as well as an effective learning environment, are key factors affecting the quality of students' learning experience. Duranton and Mason (2012) and Shillington, et al. (2012) also recognise the importance of support processes in facilitating a positive student experience in distance learning. This research study confirms this view, but extends the current body of knowledge by conveying the ODL student voice which has not previously been heard in this way.

Findings from the pilot and strand 1 data were corroborated by the strand 2 data whereby students confirmed significant benefit in 'human' interaction. As part of the

strand 2 analysis, closer inspection of interviewees' strand 1 responses was achieved by compilation of *Table 5.4* which detailed individual students' perception of the contribution each academic skill development opportunity made to their academic development. The colour-coding highlighted those opportunities which made a positive contribution to students' academic development in yellow, with negative contributions in blue. The remaining un-highlighted boxes showed those academic skill development opportunities which students' selected 'neither agree nor disagree', responses which convey a somewhat ambivalent voice. Overall a level of ambivalence was demonstrated for:

- Student services online guides
- Videos
- IT helpdesk
- Student services tutorials
- Adobe Connect tutorials

It has already been established that Adobe Connect tutorials were unavailable or not known to be available for 63.2% (n=24) of strand 1 respondents, which presumably leads to the ambivalence shown by students' responses. Students who were geographically close to the university, or for whom their course required some form of attendance, were able to take advantage of campus-based workshops or tutorials. However, the strand 1 data revealed students' significant preference for personal rather than generic academic skill development opportunities. Interviewees explained these did not necessarily meet their needs in terms of content, but they provided opportunity to ask questions and thereby resolve any skill related difficulties. Data in *Table 5.4* emphatically conveys students' ambivalence towards student services tutorials, especially in light of the fact three interviewees attended these. Existing literature suggests most universities provide remedial support which is offered in extra-curricular skill centres facilitated by support staff as opposed to being course specific and delivered by tutors. Simpson (2008), Ehlers (2004) and Shillington, et al. (2012) advocate processes for supporting students which meet individual student needs, something that is difficult to achieve in generic group sessions delivered to students with diverse educational experiences and studying different courses. Ludwig-Hardman and Dunlap (2003) argue one to one access to advisers is a critical learner support mechanism. This has certainly been confirmed by this research study, although findings from this research study highlight the significance of one to one interactions with tutors who have subject expertise to ensure academic skill development opportunities meet individual students' needs.

It is difficult to comment on students' apparent ambivalence towards the IT helpdesk, although I05 'agreed' this had made a contribution to her academic development. Personal experience suggests most students utilise the IT helpdesk for technical issues and, on reflection, the IT helpdesk should not have been included in the study as an academic skill development opportunity, even though assistance is available.

Videos were used by 48.7% (n=19) of respondents to strand 1, with 20.6% (n=7) who 'strongly agree' and 35.3% (n=12) who 'agree' videos contributed to their academic development. I04 was the only strand 2 interviewee to use videos as an academic skill development opportunity. It is impossible to establish whether videos were self-sourced by I04 or embedded within module materials, although he did not refer to academic skill development opportunities being included within modules during the interview. Interestingly I04 'strongly agreed' videos made a contribution to his academic development. It is impossible to say with any robustness whether the strand 2 data confirms that from strand 1, especially when 32.4% (n=11) of strand 1 participants responded 'neither agree or disagree'. The literature suggests generic re-usable learning objects (RLO) (which could include videos) need to be contextualised to the field and level of study or assessment style (Goodfellow, Strauss and Puxley, 2012; Watson, 2010). It is difficult to comment on the extent to which the findings of this research study contribute to the current body of knowledge. There appears to be some indication that videos and RLOs are a potentially valued academic skill development opportunity, although students may well prefer them to be contextualised to their field of study and delivered by their tutor.

Although the strand 1 data highlighted students' preference for personal rather than generic academic skill development opportunities, 14.3% (n=5) of respondents 'strongly agree' and 37.1% (n=13) 'agree' that student services online guides made a contribution to their academic development. Similarly, 8.9% (n=7) of respondents 'strongly agree' and 45.9% (n=17) 'agree' the library online guides made a contribution to their academic development. In strand 2 interviewees commented positively on the usefulness of the Harvard Referencing Guide in particular and, although the online guides were largely well received, negativity was conveyed about the accessibility of these documents. Specifically, the predominant text-based nature of the generic online guides presented challenges on students' time in being able to quickly find the information they required. I04 recalled "*...the thought of ploughing through various things trying to find what you're looking for and never quite finding what you're looking for...in the end you just sort of find your own ways of doing things*". The data seem to suggest that whilst students recognise the contribution the generic online guides make to their academic development, these resources do not fully meet the needs of ODL

students. This research study further corroborates existing literature which advocates the use of resources contextualised to meet individual students' needs.

QUAN finding 2 indicated students perceive librarian support is not available to them, but this was not confirmed by the strand 2 students, with four interviewees in strand 1 who 'strongly agree' librarian support made a contribution to their academic development. This was very much reiterated during the strand 2 interviews where positive comments were made about face to face and email interactions with librarians. I04 claimed he was actively encouraged to use the library and librarians. I02, I03 and I04 all described librarians as 'helpful', 'approachable', 'open', they responded 'very quickly' by email and "*you knew she'd be there as another source of information*" (I03). It is disappointing that 31.7% (n=13) of respondents in strand 1 and 50% (n=3) in the pilot indicated negatively ('no' or 'don't know') about the availability of librarian support as an academic skill development opportunity, particularly since those who do seek advice from librarians perceive a strong contribution to their academic development. The raw data were analysed in an attempt to establish if the discrepancies in students' knowledge about the availability of librarian support related to students' level of learning, but this proved inconclusive, with mixed responses for each level. It would seem, therefore, that students' awareness of the availability of librarian support is reliant upon the strategies used to communicate this academic skill development opportunity to them. In chapter 4 the suggestion was made to either develop librarian support for ODL students if it is not already available, or to ensure the availability and nature of the service is conveyed more effectively to this group of students. Having had opportunity to synthesise the data in this chapter, it would seem that effort should be placed on communicating the availability of librarians to ODL students since the one to one support they provide is clearly valued by students.

The pilot and strand 1 provided opportunity for the collection of preliminary data about students' perception of the contribution made to their academic development, with the Likert scale providing a mechanism for differentiating students' responses. However, strand 2 was the primary data collection method used to assess students' perceptions of the contribution made by the academic skill development opportunities they utilised. The library was identified by I03 as a particularly useful resource, but overall the skills and attributes students' gained from these academic skill development opportunities can be summarised as:

- Critical thinking skills
- Reflective practice
- Critical reading skills
- Critical reviewing of literature

- Increased confidence
- Credibility in the workplace

All interviewees were unanimously positive about the contributions these opportunities had made, although this list is students' description of the skills and attributes they gained and does not represent a direct understanding of their perspective (Maxwell, 2013). However, the online, audio-visual interviews provided opportunity not only for dialogue with participants, but also observation of their behaviour and recording nuances in their voice. So whilst this list of students' skills and attributes is based upon students' self-report, the combination of dialogue and observation provided opportunity for more effectively interpreting their perspective (Maxwell, 2013) and assessing the credibility of their responses. Whilst student self-report may have its limitations, interviews and open questions allow participants to express their ideas in their own words, rather than being constrained by categories determined by the researcher (Patton, 2002). Consideration had to be given for whether participants were truthful in their responses or had an accurate recollection of their experiences. However, this is an issue for all questionnaires and interviews, so these limitations are not unique to this research study. Students volunteered to participate and as such they were willing participants. Their responses in the interviews were credible and expanded on some of the points raised in strand 1. Ethical issues were also managed throughout the study, including the need to ensure any power in my position as an insider researcher (Trowler, 2011) was minimised and did not affect the relationship during the interviews.

Interestingly, despite the emphasis placed by students during the strand 2 interviews on referencing skills and the usefulness of the university Harvard Referencing Guide, none of the students highlighted the referencing or writing skills they had developed during their studies. Furthermore, in section 6.3 consideration was given to whether students' reasons for utilising academic skill development opportunities are simply a motivator for achieving higher marks in assessment, or whether students aspire to something more holistic but equally motivational. This research study did not measure students' development of their academic skills over a period of time. Instead, it gave ODL students a voice at a specific point in time about their academic skill development and was therefore a snapshot of their perspective (Alldred and Gillies, 2012). Having contemplated the list of skills and attributes identified by students, none explicitly relate to writing or achieving higher marks in assessment. It would therefore seem reasonable to suggest that as students reach the end of their course they are able to take a more holistic view of the contribution their studies have made.

Of equal importance, all students in strand 2 referred to the *application* of the skills they had gained towards their employment, with I05 explaining "*a big thing for me is that I*

now feel as good as everybody else". Various authors have evaluated students' experiences with academic skill development opportunities (Arndell, et al., 2013; Tribble and Wingate, 2013; Clughen and Connell, 2011; Prymachuk, et al., 2012; Watson, 2010) all of which are undertaken either with campus-based students or where there is some form of attendance for an ODL course such as induction, or where data collection methods involve student attendance. Prymachuk, et al. (2012) refer to undergraduate students' increased confidence on completion of an online study skills course. Wingate and Andon (2011) claim students gained an increased awareness in the requirements for writing for assessment. However, with the exception of increasing students' confidence, the existing literature fails to identify the intrinsic or holistic skills gained by students who utilise academic skill development opportunities, thus this research study extends the current body of knowledge in the field of skill support for students.

In summary, ODL students perceive the following academic skill development opportunities contribute to their learning:

- Opportunities where there is some form of 'human' interaction, preferably with their tutors
- Interaction with university librarians.

6.5 Students' suggestions for academic skill development opportunities

The research questions did not seek students' suggestions for academic skill development opportunities. However, having gained an understanding during the strand 2 interviews about students' perceptions of the quality of the academic skill development opportunities available to them, it was considered pragmatic to ask their opinions regarding what *they* think would facilitate students' development of their academic skills. Students' suggestions followed two distinct areas:

- There should be standardisation in the format and delivery of information.
- There is a need for more interactive approaches to ODL teaching and learning.

In terms of standardisation, I04 specifically referred to the presentation of modules within the VLE. Although the university stipulates minimum requirements for module VLE sites, there is plenty of scope for tutors to 'do their own thing', largely dependent upon their experience as an ODL tutor and technical ability. This potentially leads to considerable variation in presentation and navigation for students as they progress between modules. I04 claimed to be confident in the use of technology, yet he found the different presentational styles and approaches unhelpful. Interviewees did not convey any negativity towards the VLE itself or lack of confidence in usage, yet

variation between module VLE sites presents ODL students with challenges which all impact on their time.

In view of the importance conveyed by students on 'human' interactions or opportunities for one to one interactions with tutors, it was unsurprising they suggested more interactive strategies to facilitate engagement for ODL students. Students suggested 'live' videos where a tutor is seen delivering a teaching or training session. This could be achieved by recording campus-based classes which could be uploaded to a VLE site, although this would not be possible for courses which are only delivered online. Alternatively, tutors could prepare, deliver and record 'class-based' sessions (albeit to an empty classroom), but this is arguably not an effective use of tutor time and university resources. Online conferencing or webinars for group or individual tutorials would seem to be a more effective method to help achieve greater interaction between tutors and students, although this presents potential training requirements for tutors and students. The ideas and suggestions proposed by the interviewees are feasible with existing technologies available within the university and thus would not constitute huge financial outlay.

In summary, students made the following suggestions for academic skill development opportunities which they perceive would meet the needs of ODL students:

- Standardisation in design between module VLE sites to ensure students become confident in navigating and using resources
- Use of online conferencing, webinars and recording of 'class-based' sessions.

6.6 Chapter summary

This chapter has analysed, interpreted and synthesised the integrated findings from strand 1 (including the pilot) and strand 2 of this research study which sought to identify academic skill development opportunities available to distance learning students at the HEI in which I am employed and to explore students' perception as to whether those opportunities make a positive contribution to their academic development. The entire research study has been steered by the research questions and conceptual framework. As a consequence, analytic categories were used to provide a framework for this chapter, thereby facilitating the emergence of answers to the research questions. In addition, consideration was given to the conceptual framework devised in chapter 2 (*Figure 2.1*) to illustrate the ways in which the research study has contributed to the conceptual framework. At the inception of this research study assumptions were identified in chapter 1. These will be revisited here in light of the analysis which has taken place in this chapter.

The first assumption underlying the research claimed there to be an absence of a clear institutional strategy to support the university's corporate goal for increasing off campus provision. This led to concern for a perceived lack of parity across the portfolio of distance learning courses at the HEI in which I am employed. This assumption held true in so much as there being confusion among ODL students regarding the academic skill development opportunities available to them, particularly so in the pilot which recruited students from the same Masters' level course. Strategies used by tutors to direct students to academic skill development opportunities were lacking across all courses within the study, leading some students to find information by 'trial and error'.

A second assumption suggested academic skill development opportunities are targeted at campus-based students. This notion was illustrated by QUAN finding 2 that librarian support is perceived as not available to ODL students. Although this was not borne out by the strand 2 data, there is a perception among ODL students that librarian support is not available to students who do not attend the university campus.

The third assumption was that academic skill development opportunities are not embedded within course materials. This view was largely based upon personal perception and experience, but also the claims in existing literature that embedding does not widely occur. Of equal importance is the need for tutors to explicitly direct students to academic skill development opportunities. This notion was upheld and illustrated by QUAL finding 2 that inclusion or embedding of academic skill development opportunities within modules appears to be rather sporadic.

The fourth assumption posited that academic skill development opportunities available to students at the HEI at which I work do not meet ODL students' needs. This assumption held true for generic academic skill development opportunities provided by the university, namely library online guides, student services online guides and student services tutorials. Students' use of internet resources in preference to the generic university guides is especially indicative of university academic skill development opportunities not meeting ODL students' needs. Additionally, students in strand 2 frequently commented on the time consuming nature and their dislike of the prevalent text-based information. This notion was highlighted by QUAN finding 3 that students choose to use internet resources as a means of academic skill development in preference to the university generic online materials.

A primary goal of this research study was to establish if the academic skill development opportunities available to ODL students contribute to their academic development. No assumption was held about this notion at the outset of the study since this would have introduced an element of bias. It transpired that some academic skill development opportunities available to students do make a positive contribution to their academic

development. These are predominantly opportunities involving one to one interaction with tutors as illustrated by QUAN finding 4 (students use academic skill development opportunities where there is personal one to one interaction in preference to group interactions), QUAN finding 6 (the internet and academic skill development opportunities where there is 'human' interaction contribute to students' academic and personal development) and QUAL finding 4 (students perceive benefit in accessing opportunities for 'human' interaction, whether that is face to face or using virtual methods). QUAL finding 5 established that academic skill development opportunities made a positive contribution to students' academic and personal development.

This study identified students' awareness of various academic skill development opportunities (QUAN finding 1), but greater awareness was observed for opportunities which encompass interaction: email contact with their tutors, submitting draft work for formative feedback, formative feedback following assessment and VLE discussions. The pilot data illustrated particularly clearly the mixed responses to students' awareness of other academic skill development opportunities which initiated a discussion about the communication strategies used by tutors to inform students about the academic skill development opportunities available to them. The strand 2 interviews provided opportunity to explore in some detail strategies employed within their course, but on the whole the overall approach appeared to be rather ad hoc and 'trial and error'. Students were very aware of the availability of internet resources. Findings from this research study questioned whether undergraduate students who were the primary users of internet resources are sufficiently skilled in evaluating resources for scholarly merit, although there was some evidence of students receiving explicit direction to internet resources.

Even though students showed an awareness of the availability of a variety of academic skill development opportunities, this study revealed students exhibit clear preferences for opportunities which provide a personal level of support involving one to one interaction with tutors, with students in strand 2 emphasising the importance of academic skill development opportunities with 'human' interaction. Interestingly students in strand 1 also expressed a preference for utilising internet resources as a means of academic skill development in preference to university generic online materials, which is a surprising finding considering students' preference for personalised academic skill development opportunities. Information about the type of internet resources students accessed was not collected as part of this research study. However, further research in this area would be interesting, especially since students reported high levels of satisfaction and agreement about the contribution internet resources made to their academic development.

Strand 1 revealed students utilised academic skill development opportunities for a variety of reasons, although closer inspection of the data suggested their reasons profoundly related to a desire for personal development and success. Some evidence in strand 2 indicated embedding of academic skill development opportunities exists, but it was somewhat sporadic with no evidence this occurs across courses. Strand 2 also revealed students may not be aware of academic skill development opportunities in module content. This study therefore suggested these should be made explicit to students, with the benefits of academic skill development opportunities being highlighted in terms of the potential intellectual, practical, affective and transferable skills to be gained. There was no evidence in this study of negative impact experienced by weaker students directed to academic skill development opportunities by tutors.

The positive contribution made by academic skill development opportunities to students' academic development was evident in both strands, but again, it was the opportunities for 'human' or one to one interaction with tutors which made the strongest contribution. In strand 2, students clearly expressed their views about the importance of 'human' interaction, although it was evident the quality of that interaction is dependent upon tutors' interpersonal skills. Where tutors were less personable or approachable, this had a negative impact on students' perception of their experiences with academic skill development opportunities. Responses in strand 1 also showed the strong contribution offered by internet resources, which again seems to suggest the need for further research since students hold these in such high regard. However, in light of the time requirements involved in students searching for robust resources, the question has to be raised as to whether students would utilise the internet so extensively if university resources more effectively met their needs. In strand 2 students referred to the application of the skills gained to their employment. These were less tangible but more holistic skills or attributes gained from their engagement with academic skill development opportunities, all of which had a very positive impact on students.

The analytic processes used during this sequential QUAN→QUAL mixed methods research study provided opportunity for rigorous interrogation of the data. Numeric analysis was achieved via the QUAN data in strand 1, with the use of descriptive and inferential statistical analysis to help gain greater insight into the data. Rich descriptions from QUAL data in strand 2 provided depth and context to the results generated from the QUAN data. The final stage of data analysis in this chapter involved integration of the QUAN results and QUAL findings to promote a fuller understanding of the research problem (Tashakkori and Creswell, 2007). Themes initiated by the conceptual framework were considered during the separate QUAN and QUAL analysis stages, as well as this final integration stage, thereby leading to emerging answers to the research

questions which will be presented fully in the concluding chapter 7. The rigorous approach to the analysis of the data requires some revision of the conceptual framework which will also be presented in chapter 7.

In summary, rigorous data analysis undertaken for this research study has provided answers to the research questions. The findings contribute to and extend the existing body of knowledge in the field of academic skill development opportunities for ODL students and thus, greater understanding of students' preferences is achieved.

The next chapter draws this research study to its conclusion.

Chapter 7 Conclusion

The purpose of this sequential QUAN→QUAL mixed methods research study was to identify academic skill development opportunities available to distance learning students at the Higher Education Institution (HEI) at which I work and to explore students' perception as to whether those opportunities make a positive contribution to their academic development. This research study uniquely captured the online distance learning (ODL) student voice, exploring students' experiences with a variety of academic skill development opportunities as opposed to a single tool or technology, thereby gaining a holistic view of their preferences which is not available in the existing literature. The study utilised fully online research methods for both strands of the study and this too is something new within existing literature.

The conclusions from this study follow the research questions and the findings and therefore address five areas: (a) the availability of academic skill development opportunities; (b) students' preferences for academic skill development opportunities; (c) the occasions when students access academic skill development opportunities; (d) the reasons students utilise academic skill development opportunities; and (e) contribution to learning. The major findings are discussed and the conclusions drawn from this research are highlighted. The conceptual framework, revised in light of the study's major findings, is presented as a checklist which is a direct product of this research study and a practical tool for use by those supporting ODL students in the development of their academic skills. Recommendations are made to ODL tutors, university support services and HEI policy makers on how academic skill development opportunities for ODL students can be enhanced to improve the student experience. Possibilities for further research are identified and the limitations of the study are included in this closing chapter. Finally, the chapter concludes with a personal reflection on this study.

7.1 Answers to the research questions

7.1.1 *The availability of academic skill development opportunities*

The first major QUAN finding of this research study is that various skill development opportunities are available to ODL students. Their awareness was most prevalent where academic skill development opportunities provided interaction with tutors, such as email contact with their tutors, formative feedback following assessment and VLE discussions. A conclusion to be drawn from this finding is that students prefer occasions which provide opportunity for some form of 'human' interaction. This may be in part because it helps reduce feelings of isolation, but it may also help replicate their

previous class-based educational experiences thereby creating a more familiar learning environment. A further and related conclusion that can be made is that tutors actively encourage students to communicate with academic staff since this is known to reduce feelings of isolation which can be experienced by ODL students (Duranton and Mason, 2012). Another conclusion is that students perceive interactions with tutors as providing a higher quality learning experience than those academic skill development opportunities where there is no interaction, such as university generic online materials which are largely text-based. At the time data were collected for this research study, online resources at the HEI at which I am employed were largely text-based. Since this time there has been progress and interactive online materials aimed at helping students develop their academic skills do exist. However, I would argue even these resources have an implicit focus on campus-based students, with reference to a VLE 'supplementing face to face learning' and information about 'lectures', 'seminars', 'tutorials' and 'workshops', which requires tutors and students to interpret and contextualise to online distance learning. In this research study, virtually all students were aware of the availability of internet resources for academic skill development opportunities. It is impossible to draw any robust conclusions from this since the research study did not explore the type of resources which students accessed. However, since internet resources were highly valued by ODL students in this study, further research would help establish students' preferences in this area.

The second major QUAN finding was that ODL students perceive librarian support as not available to them. The library advertises various methods by which students are able to contact librarians, including an online chat facility, telephone and email. That said, opportunities for booking an appointment with a librarian require attendance on campus and there is no advertised alternative 'face to face' interaction, such as Skype. A conclusion that can be drawn from this finding is that communication strategies for making students aware of librarian support for ODL students need to be enhanced so that students are fully aware of the resources available to them. This could be achieved via more effective direction by tutors within course curricula, in addition to more explicit information on the library website in terms of the accessibility of librarian support for ODL students. A further related conclusion is for virtual 'face to face' appointments with librarians to be developed alongside the campus-based opportunities. Conversations with librarians since completion of this research study confirm Skype tutorials are available, but are organised on an individual basis upon request because limited resources prohibit wider advertisement.

7.1.2 Students' preferences for academic skill development opportunities

The study's third major QUAN finding was that students choose to use internet resources in preference to university generic online materials. A conclusion to be made from this is that university generic academic skill support opportunities are not designed with ODL students in mind and thus do not meet ODL students' needs. This leads students to proactively search for additional resources via the internet. ODL students' preference for internet resources seems to contravene existing literature which highlights the need for learning to be contextualised (Ehlers, 2004; Simpson, 2008; Wingate, 2006). Although it is difficult to envisage that internet resources sourced by students are contextualised, students clearly perceive value in this form of academic development. This research study did not explore students' use of the internet, so it is impossible to draw any conclusions as to whether the resources students sourced are developed specifically for ODL students. However, students' expression of the need to 'plough through' or finding information by 'trial and error' would seem to suggest students simply found it easier to find information on the internet than on the university website.

The fourth major QUAN finding was students' preference for academic skill development opportunities where there is personal one to one interaction instead of generic group interactions. This leads to the conclusion that students may not feel sufficiently confident to raise questions in group interactions, whether these are campus-based opportunities or online such as the VLE discussion forum. One to one interaction with tutors provides a 'safe' opportunity for them to discuss their personal learning experiences. A further conclusion to be drawn is that one to one interaction is an individualised and personal form of communication which more effectively meets students' needs.

7.1.3 The occasions when students access academic skill development opportunities

The research study's first major QUAL finding was that students use academic skill opportunities when preparing for assessment. One conclusion is that students understand the need to pass a module by meeting module learning outcomes and thus their use of academic skill development opportunities in preparation for assessment is pragmatic. Alternatively it could be concluded that students are motivated and aspire to achieve their best, thereby accessing academic skill development opportunities to help facilitate this.

The second major QUAL finding was the inclusion or embedding of academic skill development opportunities within modules appears to be rather sporadic. A conclusion to be drawn is that ODL tutors are unaware of the need to embed or direct students to

academic skill development opportunities. Alternatively, tutors may be focussed on delivering content and not consider the teaching of academic skills to be part of their remit (Clughen and Connell, 2011). The implication of this conclusion highlights a need for staff training. Another conclusion is tutors' expectation for students to be more autonomous as they progress through their course, thus embedding or explicit direction may diminish as a course progresses. A further conclusion to be made is that academic skill development opportunities *are* embedded, but students do not recognise these as specific skills, simply that this is part of the module content. These possible conclusions require further investigation to ensure future development of academic skill development opportunities meet ODL students' needs.

7.1.4 The reasons students utilise academic skill development opportunities

The fifth major QUAN finding and third major QUAL finding was that students use academic skill development opportunities for personal development. A conclusion to be drawn is that ODL students are motivated to succeed and thus exhibit a proactive approach in accessing academic skill development opportunities to facilitate their academic success, whether or not they are explicitly directed to them. A further related conclusion is that students perceive a variety of holistic skills can be gained via their university qualification: the practical, affective and transferable skills which an HEI course aims to deliver.

In chapter 2 the concept of ODL student motivation was discussed, particularly with respect to the potentially negative impact which may result when feedback focusses on academic weakness and tutors actively direct students to remedial skill support services (Simpson, 2008). With the exception of one student's negativity about an aspect of feedback following assessment, this research study did not find evidence to suggest academic skill development opportunities focus on rectifying academic weakness.

7.1.5 Contribution to learning

The sixth major QUAN finding of this research study was that internet and academic skill development opportunities where there is 'human' interaction contribute to students' academic and personal achievement. It is difficult to draw conclusions about the contribution made by internet resources since these were not explored during this research study. A conclusion to be made about academic skill development opportunities where there is 'human' interaction is that they provide a personalised, individual level of support which effectively meet students' needs.

The fourth major QUAL finding was that students perceive benefit in accessing opportunities for 'human' interaction, whether that is face to face or using virtual methods. There are a number of conclusions to be drawn from this finding. Firstly, as a 'customer' of the university, students may perceive that opportunities for 'human' interaction provide a higher quality service than virtual methods, such as a personalised and individual level of support. A further related conclusion is that ODL students may feel there is something to be gained by interacting with a person as opposed to reading text-based information which requires the student to analyse and synthesise information for themselves. The 'human' interaction provides opportunity not only for the student to gain responses to questions, but also for discussion of concepts, thereby providing students with an opportunity to achieve a deeper learning opportunity than might be achieved by learning alone. Another conclusion to be drawn is that 'human' interaction helps reduce the feelings of isolation which can be experienced by ODL students. A further related conclusion is that opportunities for 'human' interaction facilitate ODL students' feelings of belonging to the HEI community.

The fifth major QUAL finding was that academic skill development opportunities make a positive contribution to students' academic and personal development. The conclusion to be made is that it is possible to develop academic skill development opportunities which meet ODL students' needs. This research study provides insight into ODL students' preferences for academic skill development opportunities and, thus, the means for informing ODL tutors, university generic skill support services and university policy.

7.2 Revised conceptual framework

Critical review of the literature, combined with personal experiences and insights as an ODL tutor, contributed to the development of a conceptual framework for this study (*Figure 2.1*). Review of the literature relating to the nature of conceptual frameworks revealed a lack of clarity (Green, 2014; Ravitch and Riggan, 2012; Parahoo, 2014; Maxwell, 2013), mainly due to interchangeable use of the words 'conceptual' and 'theoretical', as well as confusion over what is described as a 'framework' or a 'model'. The choice for a narrative approach to the conceptual framework for this research study followed the principles of Bloomberg and Volpe (2008), primarily because of their practical application of a conceptual framework which was considered both useful and rigorous. The conceptual framework showed the key concepts related to what is already known about academic skill development for ODL students, and the relationship of these concepts to the research questions. The conceptual framework was reviewed following the rigorous analysis of the QUAN and QUAL data in chapters

4 and 5, and synthesis of the integrated QUAN and QUAL data in chapter 6. The revised conceptual framework is explained here. The revisions purposely refer to the 'conceptual framework' to illustrate its evolution into a practical tool, in the form of a checklist, for use by university staff in support of ODL students. The checklist is a direct product of this research study which provides a tool for use by HEI staff involved in the development of resources to support ODL students' academic skills.

Review of the literature in chapter 2 outlined the predominance of 'bolt on' learning support mechanisms (Bennett, Dunne and Carré, 2000) provided by most universities in response to the widening participation agenda and internationalisation of Western higher education systems (Tribble and Wingate, 2013), both of which contribute to students being ill-prepared for the demands of academic writing (Lillis, 2001; Haggis and Pouget, 2002; Ganobcsik-Williams, 2006). In addition, the National Audit Office (2002) claims schools do not adequately prepare students for higher education or that students attend under-performing schools (National Audit Office, 2014); thus there is a need for supplementary skill support at university. In chapter 2 it also became apparent that ODL students require a specific set of skills to promote their success in higher education. These include: low level computer skills, online etiquette, web navigation and web searching (McPherson and Nunes, 2004; Arndell, et al., 2013); specialist online skills to aid navigation of unfamiliar online environments (Tury, Robinson and Bawden, 2015); personal responsibility for learning, time management and completing their work on time (Hung, et al., 2010); self-regulation and independent learning (Pintz and Posey, 2013); autonomy (Ludwig-Hardman and Dunlap, 2003) and motivation (Chen and Jang, 2010). All of these factors led to the category of 'skill support required' on the conceptual framework. However, the word 'support' conveys a remedial and negative attitude to academic skill development; something which was not demonstrated within this research study. Whilst Simpson (2012, p.62) acknowledges some students require support for "study survival skills", he is also of the opinion that skill support which focuses on rectifying academic weakness has a demotivating effect on students. This research study revealed a predominantly positive attitude towards academic skill development opportunities, including those respondents in strand 1 who recorded their reason for accessing academic skill development opportunities was because 'my tutor suggested it'. In addition, interviewees in strand 2 proactively sought supplementary skill support for personal development. This category has therefore been revised to reflect a more positive philosophy and now reads 'skills required by students'.

In chapter 2 the determinants of quality in the ODL student experience were considered. Quality was reviewed from different stakeholder perspectives, but with

special consideration for students' perception of quality in their learning experience. A variety of factors were considered important to all students, including: social and emotional support systems, library resources, information technology and quality of the lecturer (Hill, Lomas and Macgregor, 2003); curriculum structure, library services, interaction with tutors and tutors' communication skills (Tsinidou, Gerogiannis and Fitsilis, 2010). It became evident that tutors are fundamental to the quality of the ODL student experience, with Smith (2004) identifying tutor availability and accessibility; tutor timeliness in response to queries or feedback on work; tutor ability to provide appropriate and constructive feedback; and tutor ability to form and maintain an appropriate relationship with the student at a distance as strong determinants of quality for ODL students. Technology and university processes were also important factors and thus a generic category of 'quality of learning experience' was devised in an attempt to encapsulate all aspects of quality. However, this research study highlighted the importance in effective communication by tutors about the academic skill development opportunities available to students, as well as providing constructive feedback following formative or summative assessment, particularly when there is a need to direct students to skill support services. Some might consider these to be 'soft' skills, yet Salmon (2006) suggests tutors require competent online communication skills such as self-awareness and interpersonal sensitivity. This category has therefore been revised to 'tutor communication skills' to reflect the significance of these skills in the area of students' academic skill development.

The category of 'reasons for accessing skill support' on the original conceptual framework resulted in part from personal experience, but primarily from review of the literature which supported these personal views. It became evident that several factors contribute to students' use of academic skill development opportunities. These include the fact that activities to develop students' skills are embedded in modules (Shillington, et al., 2012), or as a result of remedial action or having been directed to skill support by a tutor (Simpson, 2008). This research study revealed the primary reason students utilised the academic skill development opportunities available to them was for personal development, both in terms of their aspiration to succeed in assignments, but also to gain holistic or transferable skills for employment. This personal aspiration for success is perhaps indicative of students' motivation and determination to succeed. Interviewees in strand 2 demonstrated considerable levels of motivation; an essential attribute for online learning (Simpson, 2008) with implications for retention, achievement and course satisfaction (Chen and Jang, 2010). Students' personal desire for success could also be attributed to autonomous learning, with students taking responsibility and control of their learning (Scott, et al., 2015). Whilst embedding of academic skill development opportunities was apparent on a sporadic basis and

featured as a reason students utilised the opportunities, the literature is clear on the requirement for tutors to proactively motivate students (Simpson, 2012; Chen and Jang, 2010) throughout their course, commencing at the induction stage (Wozniak, Pizzica and Mahony, 2012). The category of the conceptual framework has been revised to 'student personal development and aspirational needs' to reflect the importance of academic skill development opportunities for students and ODL tutors' responsibility in facilitating their aspirations.

The concept of embedding academic skill development opportunities within module and course curricula was an important factor drawn from critical review of the literature. Arndell, et al. (2013), Clughen and Connell (2011) and Wingate (2006; 2007) all advocate embedding of writing skills in course curricula. Simpson (2009; 2012) and Shillington, et al. (2012) also recommend students should be directed or linked to academic skill development opportunities at relevant times during the curriculum on a 'just in time' basis. In the original conceptual framework the category 'timing and trigger points' helped steer the research which sought to explore *when* students utilised the academic skill development opportunities available to them. This was an attempt to establish if students were directed to or sought academic skill development opportunities at specific points in the academic calendar, or whether certain activities or occurrences triggered students' use of the opportunities available to them. During the strand 2 interviews it became apparent that embedding of academic skill development opportunities occurred on an ad hoc basis. It also emerged that students were directed on occasions to academic skill development opportunities, although students did not always recognise these as specific skills. This situation is unlikely to be unique to this HEI, since Wingate, Andon and Cogo (2011) suggest embedding writing skill support into HEI curricula within the UK is limited. Embedding of academic skill development opportunities is required across course curricula and should include specific skills for ODL such as time management, as well as skills for writing, thus should be available to all students irrespective of their academic capabilities. On the basis of further review of the literature and results from this research study the category of 'embedding skills 'just in time' was considered a more explicit descriptor.

The only category on the original conceptual framework to remain unchanged is 'skill development opportunities provided by the HEI'. Critical review of the literature highlighted that most universities provide remedial support which is offered in extra-curricular skill centres which are facilitated by support staff (Wingate, 2006). Whilst this method of academic skill support is convenient and cost effective for HEIs, it has considerable limitations in terms of meeting students' needs, primarily because it is not contextualised to their learning. In fact, Gamache (2002) provides a strong argument

that decontextualized learning in the form of study skill remediation contributes to student failure. The increased use of re-useable learning objects (RLO) has been employed in an attempt to enhance the overall appearance of web-based learning, but Watson (2010) contests most are designed by learning technologists and consequently are not pedagogically underpinned. Lentell (2012) provides the strongest argument that HEIs do not recognise the different pedagogy of online distance learning and endeavour to utilise generic policies for campus-based and ODL courses. Instead she recommends contextualising policies with sub-processes for distance learning. All of these issues resonate with me and the findings of this research study have not suggested the situation differs in the HEI in which I am employed. Consequently this category on the conceptual framework is left unchanged as 'skill development opportunities provided by the HEI'.

One further category has been added to the conceptual framework in light of the findings from this research study: 'ODL student preferences for one to one interaction'. Critical review of the literature highlighted academic tutors as an important determinant in the quality of students' experiences (Salmon, 2006; Simpson, 2012; Tsinidou, Gerogiannis and Fitsilis, 2010). This research study has significantly endorsed that view, but further added to the existing body of knowledge by identifying students' preferences for the academic skill development opportunities they utilise and engage with. In light of this new knowledge, it is fundamentally important that ODL academic tutors and HEIs devise academic skill development opportunities which align with ODL students' preferences. It is important for students that they are provided with a service which supports their individual needs, but also that HEI resources are utilised appropriately and effectively, with recognition for the potential impact on retention and student feedback mechanisms such as the National Student Survey.

These revisions have led to the development of a practical tool in the form of a checklist (*Figure 7.1*) which can be utilised by academic tutors, university skill support services and HEI senior management teams to support the production of academic skill development opportunities for ODL students. This checklist is a direct product of this research having emerged directly from the ODL student voice captured during this research study and it thereby demonstrates the practical application of the knowledge and understanding I have gained. Whilst the checklist is undoubtedly influenced by terminology familiar within my own HEI, it can be contextualised by others working in the sector. The checklist provides a framework which identifies the significant factors affecting the provision of high quality academic skill support for ODL students. There is no implicit suggestion for a hierarchy in the importance of these factors in the presentation of the checklist. The findings from this research study lead me to contest

the shared importance of each of the key factors. As such, academic tutors, university skill support service staff and HEI senior management teams should complete the entire checklist, not merely sections of it. This will serve to ensure ODL students remain at the centre of provision for academic skill development opportunities, thereby leading to high quality, sustainable resources which are valued by students.

Academic Skill Development for ODL Students			
Skill development opportunities provided by the university	Are these available?		
	Yes	No	Action required
Is there an institutional teaching and learning policy for ODL delivery?			
Is there an institutional communication policy for ODL delivery? <i>Eg: email for personal support, VLE announcements for module support.</i>			
Are all generic resources available and accessible to ODL students? <i>Eg: are there alternatives to campus-based workshops?</i>			
Are generic resources available for different levels of learning (levels 4, 5, 6 and 7)?			
Are generic resources text based or interactive?			
Are module/course specific resources required?			
Are there appropriate internet resources which could be used to support this module/course?			
Do generic resources available within the institution support the skills required by ODL students?			
Skills required by students	Do students require skills for this module/course?		
	Yes	No	Action required
Computer skills			
Writing skills			
Numeracy skills			
Referencing skills			
Literature searching			
Reading			
Note taking			
Time management			
Library skills			
Internet searching			
Identifying and evaluating resources			
Planning assignments			
Critical writing			
Reflection			
Self-direction and autonomy			
Embedding skills 'just in time'	Are these available?		
	Yes	No	Action required
Pre course skills diagnostic test			
Pre course skill development resources			
Induction			

Skill development resources to aid transition to new levels of learning			
Skill development resources contextualised to module content			
Formative activities in each module			
Skill development resources for each module and assessment			
Standardised format of the VLE <i>Eg: course/module/faculty/HEI templates</i>			
Student personal development and aspirational needs	Are these included within the curriculum/course?		
	Yes	No	Action required
Resources to promote progression of skills across the curriculum/course			
Skills to promote self-direction and autonomy			
Feed forward following summative assessment			
Resources to backfill 'gaps' in skill development for students who enter a module/course with accreditation of prior learning			
Tutor communication skills	Do tutors have personal development needs for online learning?		
	Yes	No	Action required
Tutors provide opportunities for 'human' interaction			
Tutors are approachable <i>Eg: evidenced by module evaluation, NSS results.</i>			
Tutors respond to students in a timely manner <i>Eg: in accordance with university policy</i>			
Tutors are conversant with ODL pedagogy in the development of module materials			
Technology supports students' learning and development			
Tutors are supportive and encourage engagement in the VLE			
Tutors use appropriate methods to motivate students			
ODL student preferences for one to one interaction	Are these available?		
	Yes	No	Action required
Effective and reliable methods of communication with tutors			
Peer interaction during the module/course			
Video conferencing/webinars between tutors and students (one to one or group interactions)			
Skill development opportunities involving 'human' interaction			

Figure 7.1: Checklist to facilitate the planning and implementation of academic skill development opportunities for ODL students

7.3 Practice implications

This research is an important study which has significant implications for the HEI at which I am employed and the sector more generally. The study was motivated by a

perception that ODL students' experiences of their distance learning courses could be improved, specifically with regard to the academic skill development opportunities available to them. Concern for a perceived lack of parity and equity between the experiences of ODL students and a potential lack of efficiency in the use of resources led to the exploration of practice within this HEI. Whilst this research study did not explicitly seek to establish the existence (or not) of a university strategy for distance learning, there is currently no evidence of a strategy to underpin academic skill development for ODL students. Recent personal experience as a faculty learning lead enables confirmation that collaboration at faculty level occurs between faculty senior managers, learning and teaching staff, librarians, skill support staff, learning leads and learning technologists. However, in the absence of a university strategy and adequate resources, any development is fragmented and reliant upon innovative individuals. Findings from this research study did reveal a lack of parity and equity between students' experiences, in part due to differences in the way the availability of academic skill development opportunities are communicated to students, but also because some ODL students are able to take advantage of generic skill support services on campus due to their geographic location. However, this research highlights these generic skill support services, whether online or campus-based, do not meet the needs of ODL students.

It is important to acknowledge that since the inception of this research study a number of important changes to teaching and learning strategy have occurred within the university. Most significant is the imminent introduction of a new VLE which will transform teaching and learning for all students. In addition, a suite of resources to support students' academic skill development were introduced shortly after data collection took place for this research study. Whilst this suite of resources are a significant improvement on what was previously available, including the inclusion of more interactive resources, personal review of these resources through the lens of this research study leads me to suggest they still do not fully meet the needs of ODL students. Some text-based resources remain and navigation within the site is laborious, thus it continues to present challenges on students' time in locating the information they need.

The unique capture of the ODL student voice in this research study using fully online research methods provided insight into students' use of academic skill development opportunities and some of the challenges they face in doing so. The student voice is thereby conveyed in the recommendations which are based on the findings, analysis and conclusions drawn from this study.

The recommendations which follow are for: (a) senior managers and university policy makers, (b) ODL tutors, (c) university support staff and (d) further research. Given that there are multiple factors affecting the provision of academic skill development opportunities for ODL students, the proposed recommendations should be considered for their appropriateness at module, course and HEI level. It is also important that a holistic approach is taken whereby ODL students' preferences are central to the provision of academic skill development opportunities. The recommendations relate to the checklist (*Figure 7.1*), thus providing a framework to facilitate the implementation of changes in practice.

Senior managers and university policy makers

Evidence from this research study confirmed the lack of a clear institutional strategy for ODL teaching and learning, specifically in the area of academic skill development. Senior managers, learning and teaching advisers and university policy makers should consider the following:

- Introduction of an institutional teaching and learning policy for ODL delivery. Alternatively, contextualisation of existing university teaching and learning policies to ODL delivery, thus leading to a more consistent approach across the institution.
- At the same time, development of an institutional communication policy to identify preferred methods of communication to convey specific types of information.
- All academic staff involved in teaching and supporting ODL students should be adequately trained to ensure they understand the specific pedagogical requirements of online teaching and learning.
- Review of generic skill support resources to ensure they are available and accessible to ODL students and that they meet students' preferences.

ODL tutors

Given the ad hoc nature by which students reported academic skill development opportunities were included as part of a module, ODL tutors should:

- Consider the skills required by students for each module.
- Adopt a 'just in time' approach to academic skill development, explicitly directing students to resources in each module.
- Review course curricula (course leaders), thus promoting progression of academic skills within and across academic levels of learning.
- At the same time, course leaders should consider how students who enter a course at various stages with accreditation of prior learning might be supported to ensure any gaps in their academic skill development are filled.
- Use a standardised format of the VLE for all modules across a course.
- Provide academic skill development opportunities where there is 'human' interaction.
- Review their own training and development needs to ensure they are conversant with ODL pedagogy and effective strategies for communicating with and motivating students.

University support staff

In light of the mixed responses by students to the generic skill support services, university support staff, in collaboration with learning and teaching advisers and ODL tutors, should:

- Ensure the availability of librarian support and the nature of the service librarians are able to provide for ODL students is made explicit on the website.
- Provide opportunities for 'human' interactivity such as Skype.
- Review existing generic skill support services to reduce the text-based nature of resources.
- Review the presentation and navigational aspects of existing generic skill support services to facilitate students' time management.

Further research

In light of the findings from this research study the following should be considered:

- Based upon students' prevalence for the use of internet resources as an opportunity for academic skill development, exploration of the resources utilised

by ODL students to establish what it is about those resources which students prefer;

- A further similar study to analyse re-useable learning objects (RLO) embedded within course materials to establish whether they represent good practice which could be disseminated across the university; and
- A study to explore the approaches used by ODL tutors to embed or direct students to academic skill development opportunities, including the communication strategies utilised.

7.4 Limitations of the study

Like all studies, this research study had limitations that impinged on the validity and transferability of the findings. These included personal skill, personal bias, participant bias, sampling errors, low response rate to the QUAN strand, personal influence on participants in the QUAL strand, use of online methods and insiderness (Creswell and Plano Clark, 2011; Waring, 2012; Oppenheim, 1992; Sharpe and Benfield, 2012; Mercer, 2007). The strand 1 online questionnaire was a potential limitation since there was no guarantee respondents would only complete the survey on one occasion, although email distribution as opposed to posting the link on a website or online forum minimised this risk (Hesse-Biber and Griffin, 2013). Respondent anonymity prevented opportunity for checking for multiple responses, however, one duplicate entry was noted where a respondent volunteered to participate in strand 2, thus they were identified via their email address. Analysis of these duplicate responses identified a number of differences which were unfortunately not clarified during strand 2 due to the problems with sound quality. The issues highlighted with this one known occurrence of multiple response were not unique to this research study and are a potential limitation of online surveys (Sue and Ritter, 2012).

The strand 1 questionnaire had its limitations affecting the validity of the study. In particular, the wording of questions was crucial in reducing measurement error (Marsden and Wright, 2010). Testing the pilot questionnaire with academic colleagues proved useful, although it could be argued colleagues' understanding of the terminology was closely aligned to my own and therefore potentially not an adequate test. For example, ODL colleagues with whom I work closely understand how email dialogue with students can support their academic skill development. By comparison, respondents to the strand 1 questionnaire may have responded positively to the use of email as an academic skill development opportunity when they may have simply used email to seek clarification to any number of queries. That said, discussion with interviewees during strand 2 confirmed that they too considered the opportunity for

email contact with ODL tutors or librarians to be a very positive method for academic skill development.

The strand 2 online, audio-visual, semi-structured interviews were a potential limitation due to lack of follow up from interviewees' strand 1 responses. At the time of the strand 2 interviews only preliminary analysis of the strand 1 data had taken place due to time constraints on working as a lone researcher. As a consequence, emergent themes had not been fully established and, even though the interviewees' strand 1 responses were reviewed prior to each interview, inexperience as a researcher meant further questions relating to strand 1 were not determined. A rigorous approach was, however, applied to the interviews in so much as adherence to the interview schedule and clarification of interviewee responses.

Possibly the greatest limitation with this study was the level of personal skill in quantitative and qualitative data analysis (Creswell and Plano Clark, 2011). In recognition of this lack of personal experience, training was sought and made use of to develop my skill as a researcher. Specifically, training was undertaken in statistics and the use of SPSS prior to implementation of the QUAN pilot phase and in the use of NVivo, both prior to and post the QUAL data collection. Advice was also sought from a statistician who reviewed preliminary analysis of the QUAN data which, at that stage, only included descriptive statistical analysis. Following those discussions, inferential statistical measurements using the chi-square test led to a more robust understanding of the data and facilitated the emergence of reliable findings.

Mixed methods research is not without its limitations, but rigorous processes to minimise these were adopted throughout the sequential QUAN→QUAL mixed methods approach used for this study. Mixed methods research aims to integrate the two approaches so as to minimise inherent weaknesses and combine the strengths of each approach (Johnson and Onwuegbuzie, 2004). This was achieved during this study from the inception of the research questions which, combined with the conceptual framework, were the lynch pin to this study. In recognition of concerns for the term 'mixing' (Bergman, 2008) and its feasibility with quantitative and qualitative data, this research study adopted the stance of Tashakkori and Creswell (2007) for 'integrating' the findings during the final stage of analysis. This facilitated further interrogation of both strands of data, thus promoting a fuller understanding of the research problem and providing opportunity to establish if each strand confirmed or disconfirmed the findings of the other.

There were a number of ethical considerations associated with the 'insider' nature of this research study. These included, but were not limited to, concerns for power and coercion towards a group of students with whom professionally I am in direct contact

(Trowler, 2011), thereby influencing decisions about the inclusion and exclusion of ODL courses within the sample, as well as potential conflict between my role as researcher and an academic within the institution. Consideration for and personal awareness of researcher bias was also made throughout the research study.

Selecting the concept of 'academic skills' was a potential limitation of this study, not only with implications for critical review of the literature but, importantly, in students' understanding of the terminology. The focus of this research study was on a range of skills which promote or facilitate effective learning and students' success in written assignments, skills which students colloquially refer to as 'academic skills'. Results from both strands confirmed that students understood the terminology in the context of this study.

There are no claims of generalisability of the findings of this research study. The low response rate to the QUAN strand 1 questionnaire could be considered a limitation of the study, but the rigour with which data analysis techniques were applied helped minimise this. In the absence of generalisability, the detail with which the findings of this study have been communicated enable potential transferability to other HEIs.

7.5 Personal reflection

In chapter 1 I explained the rationale for choosing this field of study which relates to my role as a distance learning tutor. I currently fulfil the role of personal tutor, module leader and course leader from Foundation Degree to Masters' level and in all of these roles I frequently provide advice and feedback to facilitate the development of students' academic skills. It was my perception at the outset of this study that some of the university generic skill support services are targeted towards campus-based students. Although this introduces the concept of personal bias, this perception was based on personal experience and knowledge of innovations devised by ODL colleagues because in-house resources do not meet their students' needs. In addition to this, I am a staunch pragmatist and as such it was important for me to understand students' preferences for academic skill development opportunities so that I developed or utilised resources which meet their needs. If my research was able to inform university policy-makers too, then that would be a bonus.

It is extremely rewarding to have completed a research study which answered my research questions. My initial perceptions were largely confirmed, although I no longer hold the view that university generic skill support services are *targeted* towards campus-based students. From a pragmatic perspective university generic skill support services need to meet the needs of a hugely diverse student population. Whilst the

proportion of campus-based students far exceeds those studying remotely from the university, *all* students study off campus to some degree. Consequently it is my view that improvements to university generic skill support services in light of this research study would benefit *all* students, irrespective of the mode of delivery.

I was drawn towards using a mixed methods approach because of my philosophical conundrum of not 'fitting' into a paradigm, but this was overcome when I learned of the QUAL-MM-QUAN continuum proposed by Teddlie and Tashakkori (2009). My pragmatism was not in itself a driver for choosing a mixed methods approach, but the knowledge that pragmatism is most often associated with mixed methods research (Creswell and Plano Clark, 2011) somehow gave my choice more legitimacy as a novice researcher. In the same way, the use of typologies or frameworks was a potentially useful concept, although the variations in terminologies between authors was confusing. Eventually I selected a sequential QUAN→QUAL approach on the basis this would provide the best opportunity to answer the research questions. I am nothing if not a typical pragmatist and mixed methods researcher.

Development of the research questions proved to be quite a learning experience. I was confused by what I perceived as conflicting feedback on the wording of the research questions from different supervisors. I found myself repeatedly making minimal changes to address (as I saw it) the feedback, but with little thought as to *why* I was making those changes. A doctoral course tutor commented to the effect that "*as an inexperienced researcher I did not have the confidence to justify my decisions*". Initially I felt somewhat crestfallen by their comments – how could I be expected to make and justify these decisions as an 'inexperienced researcher'? But eventually those comments galvanised my inner self. I gave myself what I have come to appreciate is precious 'thinking time'; space in which to consider in depth *what* it was I wanted to find out. I made one final revision to the research questions and these steered the entire research study.

I have not encountered any tensions between the QUAN and QUAL strands of the study and I wholeheartedly perceive equal value in both the quantitative and qualitative data. I was initially concerned about the low response rate to strand 1 and how this might affect the validity of the study. Although it is not possible to make any claims about the generalisability of the study, findings and conclusions are transferable. In hindsight, a significantly higher response rate may have been problematic as a lone researcher and this is something I shall consider in future research projects.

The new knowledge gained as a result of this research study is twofold. On a personal level I have learned much about myself, not least of which is the immeasurable tenacity and determination I have to succeed. As for the research, its contribution to the current

body of knowledge was demonstrated via this thesis, extending the ideas presented in existing literature and adding new knowledge of students' preferences for academic skill development opportunities. My role within my workplace currently remains the same, but interest has been shown by my line manager and other senior staff within the faculty to utilise the findings of my research. I look forward to sharing these findings and ultimately hope to influence policies and procedures within the university. Dissemination to the wider academic community will occur through publication in academic journals and presentation at conferences.

In concluding this doctoral journey I returned to Paper 1 (the first piece of written work in stage 1 of the course) so that I might contemplate the progress I have made. What progress it is! At the end of Paper 1 I used the words of Nelson Mandela to illustrate the short journey I had made and my anticipation of Paper 2:

"I have discovered the secret that after climbing a great hill, one only finds that there are many more hills to climb. I have taken a moment here to rest, to steal a view of the glorious vista that surrounds me, to look back on the distance I have come" Nelson Mandela (1995, p.751).

Although my doctoral journey has now reached its end, the words of Nelson Mandela remain of huge significance and eloquently summarise the journey I have accomplished. I *have* conquered several hills and, as I now take a moment of rest, the mist has cleared and the vista has transformed into one of endless opportunities.

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Appendices

Appendix 1: Participant information sheet (PIS) strand 1



Cambridge Chelmsford Peterborough

PARTICIPANT INFORMATION SHEET

Section A: The Research Project

1. *Title of project:*

Critical analysis of academic skill development opportunities for online distance learning students at a UK university

2. *Purpose and value of study:*

The purpose of the study is to seek answers to the following research questions by gaining the views of students who are studying by online distance learning (ODL) at Anglia Ruskin University:

- What academic skill development opportunities are available for ODL students?
- What academic skill development opportunities do ODL students use?
- When do students access the different opportunities available?
- Why do students access academic skill development opportunities?
- What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

As a higher education student you will have developed a range of academic skills during your studies, such as literature searching, essay writing, reflective writing and referencing using the Harvard system. As an ODL tutor at Anglia Ruskin University, my perception is that ODL students have different opportunities for developing their academic skills to campus based students and this may be because ODL tutors tend to devise academic skill development opportunities to meet the needs of their students. This means there may be lack of parity between the academic skill development opportunities available to ODL students across the university. The purpose of this study is to identify academic skill development opportunities available to ODL students and to explore students' perception as to whether these opportunities make a positive contribution to their academic development.

Your opinions will be invaluable in contributing to future developments to support ODL students at Anglia Ruskin University.

3. *Invitation to participate*

You are invited to participate in phase 1 of this project as a student studying on an online distance learning course at Anglia Ruskin University.

4. *Who is organising the research*

The research is being organised and undertaken solely by myself, Yvette Winnard, as part of my Professional Doctorate in Education. All documentation, notes, data and results will only be seen and analysed by myself.

I shall have access to two Supervisors throughout the duration of my research project. My Supervisors are:

- Dr Geraldine Davis
- Dr Phil Long

The Supervisors will have access to any documentation, notes or data but not the names or any identifying features of participants. Confidentiality of participants will be maintained.

5. *What will happen to the results of the study*

Results of the study will be evaluated and compiled into my thesis. Subsequently I aim to publish the findings of my research in peer reviewed journals and conference presentations.

6. *Source of funding for the research*

There is no external funding for this research.

7. *Contact for further information*

If you have any further questions or concerns about this research project or your involvement in it, please do not hesitate to contact me by email at Yvette.winnard@student.anglia.ac.uk.

If you have any concerns you wish to direct to the project Supervisor, please contact Dr Geraldine Davis by email at geraldine.davis@anglia.ac.uk.

Section B: Your Participation in the Research Project

1. *Why you have been invited to take part?*

As an online distance learning student it is unlikely you will have been able to access the campus-based, face to face, opportunities for study skills support. I am inviting you to take part because I wish to identify the academic skill development opportunities available to online distance learning students and to explore students' perception about the effectiveness of these opportunities in contributing to their academic development.

2. *Whether you can refuse to take part*

You do not have to take part in this research project. I would, however, be very grateful if you would consider participating in this research as I would value your contribution to the future development of academic skill development opportunities for online distance learning students at Anglia Ruskin University.

3. *Whether you can withdraw at any time, and how*

Completion of the phase 1 online questionnaire comprises your agreement to participate in this phase of the study *only*. If you do not wish to participate in this study you should *not* complete the online questionnaire.

4. *What will happen if you agree to take part (brief description of procedures/tests)?*

You have been sent the following information via email:

- This Participant Information Sheet (phase 1)
- The URL for an online questionnaire

If you wish to participate in phase 1 of this research study you should click the link to the online questionnaire at this end of this Participant Information Sheet. The online questionnaire will take approximately 15 minutes to complete. **The online questionnaire is now open for completion and closes on February 28th, 2015.**

At the end of the online questionnaire you will be asked if you would be willing to participate in phase 2 of the study, which will involve online, audio-visual interviews with myself, using Adobe Connect. If you are willing to participate in phase 2, please indicate this on the online questionnaire. I will contact you by March 31st, 2015 with information to explain phase 2 of the study.

5. *Whether there are any risks involved (e.g. side effects from taking part) and if so what will be done to ensure your wellbeing/safety*

There will not be any physical risks to you at any stage. Information you provide on the online questionnaire will be anonymous and not divulged to any third party. Furthermore, data resulting from your responses on the online questionnaire will be anonymised both in notes and in the final thesis. If you have any concerns about your academic skills or the opportunities available to you, you should contact your Personal Tutor for advice or support.

6. *Agreement to participate in this research should not compromise your legal rights should something go wrong*

Your legal rights are not affected by participation in this research project.

7. *Whether there are any special precautions you must take before, during or after taking part in the study*

You do not need to take any special precautions prior to completion of the online questionnaire.

8. *What will happen to any information/data/samples that are collected from you?*

Information, notes and data obtained during this research project will only be seen and analysed by myself and checked by my supervisors. Notes will be stored on a University laptop computer which is not shared and is accessed by personal login. All files created will be password protected and encrypted. On completion of the thesis all notes and recordings will be confidentially destroyed.

9. *Whether there are any benefits from taking part*

There are no personal benefits to taking part in this research project, although it may provide you with opportunity to reflect upon your academic skills and development needs. It is anticipated that data obtained will directly inform university strategies for supporting online distance learning students in the future.

10. *How your participation in the project will be kept confidential*

You have been sent this Participant Information Sheet to your student email address by myself. You will find the URL link to the online questionnaire below. Data will not be traceable to any individual participant and the confidentiality of your responses will be maintained at all times.

Confidentiality will be maintained at all times and will be facilitated in a number of ways:

- All notes and data generated will only be handled by myself and will be identified by use of a code.
- All hardcopy information will be stored under locked conditions which is accessible solely by myself.
- Computer files generated will be password protected, encrypted and accessible only by myself on a University laptop personal computer. All files will be anonymised using the individual's code.
- On completion of the research all hardcopy information will be destroyed following University procedures for the disposal of confidential waste.

It is my intention to publish the findings of this research project. Procedures for maintaining confidentiality and anonymity will be adhered to. You will therefore not be identified at publication, although acknowledgement will be made in general terms to the students who have helped with this research project.

To take part in phase 1 of this research study click the following link to access the online questionnaire - <https://www.surveymonkey.com/r/WBLYLKY>

YOU SHOULD KEEP THIS PARTICIPANT INFORMATION SHEET

Appendix 2: Participant information sheet (PIS) strand 2



PARTICIPANT INFORMATION SHEET

Section A: The Research Project

1. *Title of project:*

Critical analysis of academic skill development opportunities for online distance learning students at a UK university

2. *Purpose and value of study:*

The purpose of the study is to seek answers to the following research questions by gaining the views of students who are studying by online distance learning (ODL) at Anglia Ruskin University:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill development opportunities in meeting their needs?

As a higher education student you will have developed a range of academic skills during your studies, such as literature searching, essay writing, reflective writing and referencing using the Harvard system. As an ODL tutor at Anglia Ruskin University, my perception is that ODL students have different opportunities for developing their academic skills to campus based students and this may be because ODL tutors tend to devise academic skill development opportunities to meet the needs of their students. This means there may be lack of parity between the academic skill development opportunities available to ODL students across the university. The purpose of this study is to identify academic skill development opportunities available to ODL students and to explore students' perception as to whether these opportunities make a positive contribution to their academic development.

Your opinions will be invaluable in contributing to future developments to support ODL students at Anglia Ruskin University.

3. *Invitation to participate*

You have already participated in phase 1 of the project by completing the online questionnaire. You are now invited to participate in phase 2 of this project which involves an online, audio-visual, semi-structured interview using Adobe Connect with myself, Yvette Winnard. The interview will take approximately 45 minutes and will be arranged at a mutually convenient time during May or June, 2015. Once the appointment has been agreed you will be emailed instructions for use and login to the Adobe Connect session. At the start of the online interview I will help you to familiarise yourself with the online forum.

4. *Who is organising the research*

The research is being organised and undertaken solely by myself, Yvette Winnard, as part of my Professional Doctorate in Education. All documentation, notes, data and results will only be seen and analysed by myself.

I shall have access to two Supervisors throughout the duration of my research project. My Supervisors are:

- Dr Geraldine Davis
- Dr Phil Long

The Supervisors will have access to any documentation, notes or data but not the names or any identifying features of participants. Confidentiality of participants will be maintained.

5. What will happen to the results of the study

Results of the study will be evaluated and compiled into my thesis. Subsequently I aim to publish the findings of my research in peer reviewed journals and conference presentations.

6. Source of funding for the research

There is no external funding for this research.

7. Contact for further information

If you have any further questions or concerns about this research project or your involvement in it, please do not hesitate to contact me by email at Yvette.winnard@student.anglia.ac.uk.

If you have any concerns you wish to direct to the project Supervisor, please contact Dr Geraldine Davis by email at geraldine.davis@anglia.ac.uk.

Section B: Your Participation in the Research Project

11. Why you have been invited to take part?

Having gathered responses from all participants who completed the phase 1 online questionnaire, you have been selected for invitation to participate in phase 2 of the project. The aim of the online, audio-visual, semi-structured interview is to seek clarification of key points identified from questionnaire responses, and furthermore, to gain greater depth to some of these issues.

12. Whether you can refuse to take part

You do not have to take part in this phase of the research project. However, seeking clarification and depth to online questionnaire responses will further enrich the final data and lead to a more robust study.

If, having read this Participant Information Sheet, you still wish to participate in phase 2 of the project, you should read and sign the consent form attached to the same email.

13. Whether you can withdraw at any time, and how

You can withdraw from the project at any stage. If you wish to withdraw you should complete the appropriate section of the consent form and return it to me by email at Yvette.winnard@student.anglia.ac.uk.

14. What will happen if you agree to take part (brief description of procedures/tests)?

If you agree to take part you will be required to read and sign the consent form and return it to me by email at Yvette.winnard@student.anglia.ac.uk. You should retain a copy of the consent form for your own records.

At the start of the online, audio-visual, interview you will be given opportunity to ask any questions you may have.

The interview will follow a semi-structured format and will take approximately 45 minutes plus a few minutes at the start of the interview during which I will help you familiarise yourself with the online forum. Notes may be taken during the interview to ensure all questions are fully addressed. The interview will be audio-recorded using Adobe Connect, but you will not be identified by name at any stage before, during or after the interview.

15. *Whether there are any risks involved (e.g. side effects from taking part) and if so what will be done to ensure your wellbeing/safety*

There will not be any physical risks to you at any stage. Comments made during the audio recording will be strictly confidential and not divulged to any third party. Data resulting from your comments during the interview will be anonymised both in notes and in the final thesis. Confidentiality will be maintained at all times. If you have any concerns about your academic skills or the opportunities available to you, you should contact your Personal Tutor for advice or support.

16. *Agreement to participate in this research should not compromise your legal rights should something go wrong*

Your legal rights are not affected by participation in this research project. You are entitled to withdraw at any stage. If you wish to withdraw you should complete the appropriate section of the consent form and return it to me by email at Yvette.winnard@student.anglia.ac.uk.

17. *Whether there are any special precautions you must take before, during or after taking part in the study*

You do not need to take any special precautions prior to the interview.

18. *What will happen to any information/data/samples that are collected from you?*

Information, notes, audio-recordings and data obtained during this research project will only be seen and analysed by myself and checked by my supervisors. Notes will be stored on a University laptop computer which is not shared and is accessed by personal login. All files created will be password protected and encrypted. On completion of the thesis all notes and recordings will be confidentially destroyed.

On completion of the research project I shall be seeking to publish the findings. Acknowledgement will be made to the contributions made by students, but anonymity and confidentiality will be maintained.

19. *Whether there are any benefits from taking part*

There are no personal benefits to taking part in this research project, although it may provide you with opportunity to reflect upon your academic skills and development needs. It is anticipated that data obtained will directly inform university strategies for supporting online distance learning students in the future.

20. *How your participation in the project will be kept confidential*

Confidentiality will be maintained at all times and will be facilitated in a number of ways:

- All notes, audio-recordings and data generated will only be handled by myself and will be identified by use of a code.
- All hardcopy information will be stored under locked conditions which is accessible solely by myself.
- Computer files generated will be password protected, encrypted and accessible only by myself on a University laptop personal computer. All files will be anonymised using the individual's code.
- On completion of the research all hardcopy information will be destroyed following University procedures for the disposal of confidential waste.

It is my intention to publish the findings of this research project. Procedures for maintaining confidentiality and anonymity will be adhered to. You will therefore not be identified at publication, although acknowledgement will be made in general terms to the students who have helped with this research project.

YOU SHOULD KEEP THIS PARTICIPANT INFORMATION SHEET

Appendix 3: Strand 2 consent form

Participant Consent Form



NAME OF PARTICIPANT:

Title of the project: Critical analysis of academic skill development opportunities for online distance learning students at a UK university

Researcher contact details:

Yvette Winnard

Yvette.winnard@student.anglia.ac.uk

1. I agree to take part in the above research. I have read the Participant Information Sheet which was sent to me by email with this form. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
2. I understand that I am free to withdraw from the research at any time, for any reason and without prejudice.
3. I have been informed that the confidentiality of the information I provide will be safeguarded.
4. I am free to ask any questions at any time before and during the study.
5. I have retained a copy of this form and the Participant Information Sheet.

Data Protection: I agree to the University¹⁷ processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me

Name of participant

(print).....Signed.....Date.....

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete the form below and return to the researcher named above.

Title of Project: Critical analysis of academic skill development opportunities for online distance learning students at a UK university

I WISH TO WITHDRAW FROM THIS STUDY

Signed: _____

Date: _____

¹⁷ "The University" includes Anglia Ruskin University and its partner colleges

Appendix 4: Strand 1 questionnaire

Academic skill development opportunities for online distance learning students

Thank you for taking the time to complete this questionnaire which is phase 1 of a research study to explore the academic skill development opportunities available to online distance learning students at a UK university.

The questionnaire will take approximately 15 minutes to complete. All responses are anonymous and will be treated confidentially.

Please answer each question in order. At the end of the questionnaire you will be asked if you would be willing to participate in phase 2. When you have completed the questionnaire please click 'Done'.

Thank you.

Academic skill development opportunities for online distance learning students

1. Which level of course are you currently studying?

☐ Foundation Degree

☐ Bachelor Degree

☐ Masters' Degree

2. Which faculty delivers your course?

- ☐ Arts, Law and Social Sciences (ALSS)
- ☐ Lord Ashcroft International Business School (LAIBS)
- ☐ Science and Technology (FST)
- ☐ Health, Social Care and Education (FHSCE)
- ☐ Medical Science (FMS)
- ☐ Don't know

3. Are you studying on a full or part time basis?

- ☐ Full time student
- ☐ Part time student

Academic skill development opportunities for online distance learning students

4. What do you consider to be academic skills? Please respond to each prompt in the list below.

	Yes	No	Don't know
Literature searching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Note taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet searching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying useful resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Referencing skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating literature sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing Critically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Academic skill development opportunities for online distance learning students

5. What opportunities are available to help you develop your academic skills? Please respond to each prompt in the list below.

	Yes	No	Don't Know
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE Discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/, MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Academic skill development opportunities for online distance learning students

6. Which of these academic skill development opportunities have you made use of? Please respond to each prompt in the list below.

	Yes	No	Not available
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic skill development opportunities for online distance learning students

7. How frequently have you used these academic skill development opportunities?

	Never	Rarely	Sometimes	Often	Always
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Why did you use these academic skill development opportunities?

- ☐ To improve my grades
- ☐ To become more confident writing my assignments
- ☐ To help me to manage my studies better
- ☐ My tutor suggested it
- ☐ I failed an assignment
- ☐ They are included as part of a module

Other (please specify)

Academic skill development opportunities for online distance learning students

9. How satisfied are you that these academic skill development opportunities meet your needs? Please respond to each prompt in the list below.

	Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Completely satisfied
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic skill development opportunities for online distance learning students

10. Have these opportunities contributed to your academic development? Please respond to each prompt in the list below.

	Strongly Disagree	Disagree	Agree	Strongly agree	Neither agree nor disagree
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Thank you for your time in completing this questionnaire.

If you would like to participate in phase 2 of this research study, please enter your student email address in the box below. I will contact you at this address to inform you about the online, audio-visual interview.

Thank you

Yvette Winnard

Appendix 5: Strand 1 pilot questionnaire

Academic skill development opportunities for online distance learning students

Thank you for taking the time to complete this questionnaire which is phase 1 of a research study to explore the academic skill development opportunities available to online distance learning students at a UK university.

The questionnaire will take approximately 15 minutes to complete. All responses are anonymous and will be treated confidentially.

Please answer each question in order. At the end of the questionnaire you will be asked if you would be willing to participate in phase 2. When you have completed the questionnaire please click 'Done'.

Thank you.

1. Which level of course are you currently studying?

☐ Foundation Degree

☐ Bachelor Degree

☐ Masters' Degree

Academic skill development opportunities for online distance learning students

2. What do you consider to be academic skills? Please respond to each prompt in the list below.

	Yes	No	Don't know
Literature searching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Note taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet searching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying useful resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Referencing skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating literature sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing Critically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Academic skill development opportunities for online distance learning students

3. What opportunities are available to help you develop your academic skills? Please respond to each prompt in the list below.

	Yes	No	Don't Know
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE Discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/, MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Academic skill development opportunities for online distance learning students

4. Which of these academic skill development opportunities have you made use of? Please respond to each prompt in the list below.

	Yes	No	Not available
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic skill development opportunities for online distance learning students

5. How frequently have you used these academic skill development opportunities?

	Never	Rarely	Sometimes	Often	Always
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Why did you use these academic skill development opportunities?

- ☐ To improve my grades
- ☐ To become more confident writing my assignments
- ☐ To help me to manage my studies better
- ☐ My tutor suggested it
- ☐ I failed an assignment
- ☐ They are included as part of a module

Other (please specify)

Academic skill development opportunities for online distance learning students

7. How satisfied are you that these academic skill development opportunities meet your needs? Please respond to each prompt in the list below.

	Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Completely satisfied
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic skill development opportunities for online distance learning students

8. Have these opportunities contributed to your academic development? Please respond to each prompt in the list below.

	Strongly Disagree	Disagree	Agree	Strongly agree	Neither agree nor disagree
Librarian support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services online guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student services tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT helpdesk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email contact with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submitting draft work for formative feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Formative feedback following assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VLE discussion forum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone tutorials with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online chat eg: Skype/MSN Messenger with tutors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adobe Connect audio visual tutorials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Videos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Academic skill development opportunities for online distance learning students

9. If you would like to participate in phase 2 of this research study, please enter your student email address in the box below. I will contact you at this address to inform you about the online, audio-visual interview.

Thank you

Yvette Winnard

Appendix 6: Strand 2 semi-structured interview questions

Research Questions

1. What ASDOs are available for ODL students?
2. What ASDOs do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access ASDOs?
5. What are ODL students' perceptions of the effectiveness of ASDOs in meeting their needs?

1. Do you attend campus for any aspect of your course?
2. What motivates you during your studies?
3. Please explain what you understand by 'academic skills' – perhaps you could explain this as if you were explaining to a new student the types of skills they will need during their studies.
4. How did you find out about the various academic skill development opportunities that are available to you? For example were you informed via your course leader/module leader/personal tutor or did you explore the university website using your own initiative?
5. How did you decide which academic skill development opportunities to access or make use of? (*ie: did the student use Study Skills Plus?*)
6. Were there specific points during a term when you would access various opportunities?
If yes, what points were these and what was the trigger for your decision to access these opportunities?
7. Are academic skill development opportunities part of your course curriculum within different modules? (*For instance as a Masters student have you been taught about critical writing?*)
If yes, what skills are taught?
What is delivered ie: what format does it take?
When is it delivered?
Who by ie: module leader/student support/personal tutor?
8. To what extent is the 'human' aspect of study skill support important to you?
9. Why have you used the various academic skill development opportunities that are available to you?
10. In what ways have the various academic skill development opportunities you have used contributed to your academic development?
11. Can you think of any other academic skill development opportunities which might improve the student experience for distance learning students?

Appendix 7: Email content for participants (strand 1)

Subject of email: Invitation to participate in research into academic skill development for online distance learning students (Phase 1)

Dear Student

I am an online distance learning course leader at Anglia Ruskin University and also a research student undertaking a Professional Doctorate in Education. My research relates to the academic skill development opportunities (study skills support) available to online distance learning students and whether these opportunities meet students' needs.

The research project adopts a mixed methods approach and will be undertaken in two phases. I would like to invite you to participate in phase 1 by completing an online questionnaire. You will find further information about my research in the Participant Information Sheet attached to this email. The Participant Information Sheet explains the purpose of the research study, with particular emphasis on the implications for your involvement such as maintaining your confidentiality and anonymity.

If you are willing to complete the online questionnaire, you will be directed to a link at the end of the Participant Information Sheet. I anticipate the online questionnaire will take approximately 15 minutes to complete. The closing date for completing the online questionnaire is February 28th, 2015.

If you have any queries regarding the research project that are not addressed by the Participant Information Sheet, please email me at [redacted].

Kind regards,
Yvette Winnard

Research Student
Department of Education
Faculty of Health, Social Care and Education
Anglia Ruskin University
Chelmsford Campus

Appendix 8: Email content for participants (strand 2)

Subject of email: Invitation to participate in research into academic skill development for online distance learning students (Phase 2)

Dear Student

I would like to take this opportunity to thank you for completing the phase 1 online questionnaire as part of my research project and, furthermore, for agreeing to take part in phase 2.

Phase 2 will involve an online, audio-visual, semi-structured interview using Adobe Connect with myself. The interview will take place at a mutually convenient time during May or June, 2015 and I shall email you in due course to arrange this. Interviews will take approximately 45 minutes plus a few minutes at the start of the interview during which I will help you familiarise yourself with the online forum. Interviews will be audio-recorded using Adobe Connect to ensure I capture all of your comments accurately.

In the meantime you will find a Participant Information Sheet attached to this email which provides detail regarding phase 2 of this research project.

If, having read the Participant Information Sheet, you remain willing to participate in the interview phase, I would ask you to read and electronically sign the consent form which is also attached to this email. The consent form should be returned to me by email at [redacted]. You should retain a copy of the signed consent form for your records.

In the event that you wish to withdraw from phase 2 of the project, you should sign the appropriate section of the consent form and return it to me by email at [redacted]

If you have any queries regarding the research project that are not addressed by the Participant Information Sheet, please email me at [redacted].

I look forward to meeting you during the online interview.

Kind regards,
Yvette Winnard

Research Student
Department of Education
Faculty of Health, Social Care and Education
Anglia Ruskin University
Chelmsford Campus

RESEARCH ETHICS APPLICATION FORM (STAGE 1)

More information on ethics procedures and any documents detailed in bold can be found at: www.anglia.ac.uk/researchethics. **You must read the Question Specific Advice for Stage 1 Research Ethics Approval form.**

All research carried out by students and staff at Anglia Ruskin University, and in general all students at our Associate Colleges, must comply with **Anglia Ruskin University Policy and Code of Practice for the Conduct of Research**.

There is no distinction between undergraduate, taught masters, research degree students and staff research.

All research projects, including pilot studies, must receive research ethical approval prior to approaching participants and/or commencing data collection. Completion of this Stage 1 Research Ethics Application Form is mandatory for all research applications*. It should be completed by the Principal Investigator in consultation with any co-researchers on the project, or the student in consultation with his/her research project supervisor.

**For research only involving animals please complete the Animal Ethics Review Checklist instead of this form.*

All researchers should:

- Ensure they comply with any laws and associated Codes of Practice that may be applicable to their area of research.
- Ensure their study meets with relevant Professional Codes of Conduct.
- Complete the relevant compulsory research ethics training.
- Refer to the Question Specific Advice for the Stage 1 Research Ethics Approval.
- Consult the Guidelines for Applying for Research Ethics Approval at Anglia Ruskin University.

If you are still uncertain about the answer to any question please speak to your Dissertation Supervisor/Supervisor, Faculty Research Ethics Panel (FREP) Chair or the Departmental Research Ethics Panel (DREP) Chair.

Researchers are advised that projects carrying higher levels of ethical risk will:

- *require the researchers to provide more justification for their research, and more detail of the intended methods to be employed;*
- *be subject to greater levels of scrutiny;*
- *require a longer period to review.*

Researchers are strongly advised to consider this in the planning phase of their research projects.

Section 1: RESEARCHER AND PROJECT DETAILS

Researcher details:							
Name(s):		Yvette Winnard					
Department:		Education					
Faculty:		Health, Social Care and Education					
Anglia Ruskin email address:							
Status:							
Undergraduate		Taught Postgraduate		Postgraduate Research	✓	Staff	
If this is a student project:							
SID:							
Course title:		Professional Doctorate in Education					
Supervisor/tutor name		Dr Geraldine Davis/Dr Phil Long					

Project details:	
Project title (<i>not</i> module title):	<i>Critical analysis of academic skill development opportunities for online distance learning students at a UK university</i>
Data collection start date: (<i>note must be prospective</i>)	September 1 st , 2014
Expected project completion date:	August 2016
Is the project externally funded?	No
Licence number (if applicable):	N/A
CONFIRMATION STATEMENTS – please tick the box to confirm you understand these requirements	
The project has a direct benefit to society and/or improves knowledge and understanding.	✓
All researchers involved have completed relevant training in research ethics, and consulted the Guidelines for Applying for Ethical Approval at Anglia Ruskin University.	✓
The risks participants, colleagues or the researchers may be exposed to have been considered and appropriate steps to reduce any risks identified taken (risk assessment(s) must be completed if applicable, available at: http://rm.anglia.ac.uk/extlogin.asp) or the equivalent for Associate Colleges.	✓
My research will comply with the Data Protection Act (1998) and/or data protection laws of the country I am carrying the research out in, as applicable. For further advice please refer to the <u>Question Specific Advice for the Stage 1 Research Ethics Approval</u> .	✓
Project summary (maximum 500 words): <i>Please outline rationale for the research, the project aim, the research questions, research procedure and details of the participant population and how they will be recruited.</i>	

Rationale:

As course leader of two online distance learning (ODL) courses I perceive a lack of parity in opportunities for academic skill development between campus-based and ODL students within Anglia Ruskin University. Critical review of contemporary literature has revealed issues relating to the academic skill development of ODL students, namely: the notion that academic skill development opportunities are perceived to focus on rectifying academic weakness and, skill development opportunities should be embedded within course design.

Project Aims:

The aim is to identify academic skill development opportunities available to ODL students at Anglia Ruskin University and to explore students' perception of the contribution these opportunities make to their academic development.

The project will result in the completion of the thesis for my Professional Doctorate in Education. Findings will be utilised to inform the development of teaching and learning strategies for supporting ODL students within Anglia Ruskin University.

Research Questions:

The research questions will facilitate exploration of the key issues and enable *critical analysis of academic skill development opportunities for ODL students at Anglia Ruskin University*:

1. What academic skill development opportunities are available for ODL students?
2. What academic skill development opportunities do ODL students use?
3. When do students access the different opportunities available?
4. Why do students access academic skill development opportunities?
5. What are ODL students' perceptions of the effectiveness of academic skill opportunities in meeting their needs?

Research Procedure:

The research will be conducted using a mixed methods approach.

- Strand 1 - numeric data will be collected via an online questionnaire to provide an overview of the academic skill development opportunities available to students; including the opportunities students make use of, the frequency with which these opportunities are used, the stage of their course students access these opportunities and a 'score' to indicate students' perception of the value of these opportunities in contributing to their academic development. A pilot phase of strand 1 will test the adequacy of the online questionnaire as a research instrument and enable refinement of questions prior to strand 1, as well as providing opportunity for identifying potential problems that might occur with the proposed methods.
- Strand 2 - qualitative data will be generated via online, audio-visual, semi-structured interviews. Rich descriptions from this data will provide depth and context to the findings generated from strand 1.

Participants:

Strand 1 – participants will be invited from students registered on ODL courses, excluding short courses at undergraduate or postgraduate level and doctoral courses. Participants will be informed about the research via email which will include the Participant Information Sheet (PIS) and a URL link to the online questionnaire. Participants' implied consent via completion of the online questionnaire will be explained in the PIS.

Strand 2 – a strategic sample of participants will be selected on the basis of initial analysis from strand 1. Participants will authorise their willingness to participate in strand 2 via a closing question in strand 1. Consent will be via the consent form which will be distributed via email.

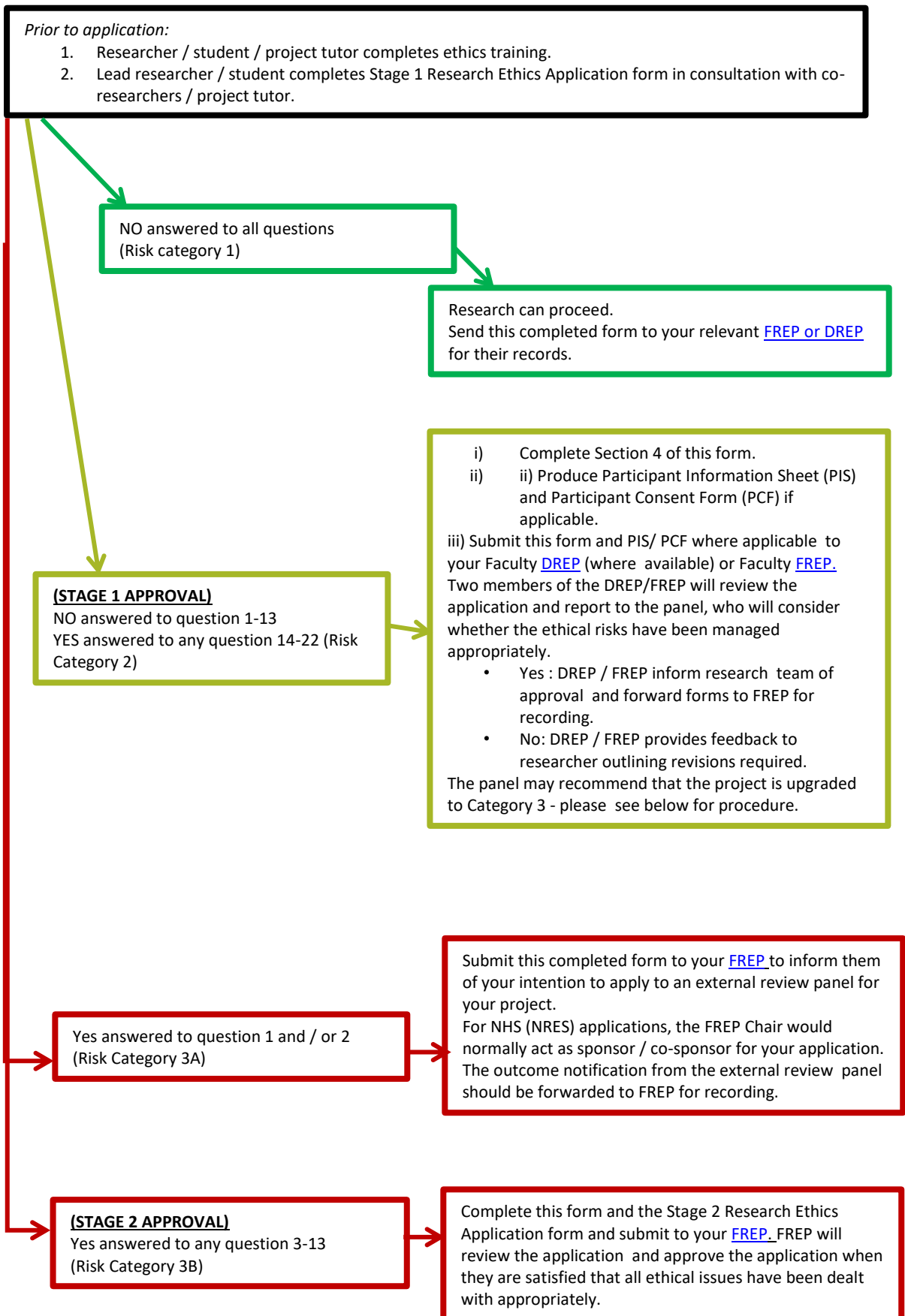
(496 words)

Section 2: RESEARCH ETHICS CHECKLIST - please answer YES or NO to ALL of the questions below.

WILL YOUR RESEARCH STUDY?		YES	NO
1	Involve any external organisation for which separate research ethics clearance is required (e.g. NHS, Social Services, Ministry of Justice)?		✓
2	Involve individuals aged 16 years of age and over who lack capacity to consent and will therefore fall under the Mental Capacity Act (2005)?		✓
3	Collect, use or store any human tissue/DNA including but not limited to serum, plasma, organs, saliva, urine, hairs and nails? Contact matt.bristow@anglia.ac.uk		✓
4	Involve medical research with humans, including clinical trials?		✓
5	Administer drugs, placebos or other substances (e.g. food substances, vitamins) to human participants?		✓
6	Cause (or could cause) pain, physical or psychological harm or negative consequences to human participants?		✓
7	Involve the researchers and/or participants in the potential disclosure of any information relating to illegal activities; or observation/handling/storage of material which may be illegal?		✓
8	With respect to human participants or stakeholders, involve any deliberate deception, covert data collection or data collection without informed consent?		✓
9	Involve interventions with children under 18 years of age?		✓
10	Relate to military sites, personnel, equipment, or the defence industry?		✓
11	Risk damage or disturbance to culturally, spiritually or historically significant artefacts or places, or human remains?		✓
12	Involve genetic modification, or use of genetically modified organisms?		✓

13	Contain elements you (or members of your team) are not trained to conduct?		✓
14	Potentially reveal incidental findings related to human participant health status?		✓
15	Present a risk of compromising the anonymity or confidentiality of personal, sensitive or confidential information provided by human participants and/or organisations?		✓
16	Involve colleagues, students, employees, business contacts or other individuals whose response may be influenced by your power or relationship with them?	✓	
17	Require the co-operation of a gatekeeper for initial access to the human participants (e.g. pupils/students, self-help groups, nursing home residents, business, charity, museum, government department, international agency)?	✓	
18	Offer financial or other incentives to human participants?		✓
19	Take place outside of the country in which your campus is located, in full or in part?		✓
20	Cause a negative impact on the environment (over and above that of normal daily activity)?		✓
21	Involve direct and/or indirect contact with human participants?	✓	
22	Raise any other ethical concerns not covered in this checklist?		✓

Section 3: APPROVAL PROCESS



Section 4: ETHICAL RISK (Risk category 2 projects only)

Management of Ethical Risk (Q14-22)

For each question 14-22 ticked 'yes', please outline how you will manage the ethical risk posed by your study.

There will be no physical risks to participants or myself, the researcher. Both strands of the research study will be facilitated using online methods; consequently there will be no form of physical intervention. The ethical risks will be managed as follows:

a) Gatekeepers:

Permission will be sought from Head(s) of Department and Course Leaders for the researcher to invite their students to participate in this research study. Gatekeepers are not involved in any aspect of the research study and no risks to them are envisaged. Participant Information Sheets will inform students that their Head of Department and Course Leader are not involved in any aspect of the research study, although they have given their permission for students to be invited to participate.

b) Informed Consent:

Strand 1 Pilot and Strand 1 - A Participant Information Sheet (Appendix 1) will be sent via email (Appendix 2) to participants. The URL for the online questionnaire will be included in the Participant Information Sheet. Consent will be assumed by completion of the online questionnaire. Participants who complete the Strand 1 questionnaire will be asked to indicate their willingness to participate in Strand 2. Any concerns which participants may have can be addressed via email directly to myself.

Strand 2 - A sample group will be derived from respondents to the Strand 1 questionnaires. Those selected will be invited by email (Appendix 3) to participate in online, audio-visual, semi-structured interviews using Adobe Connect. The interview schedule (Appendix 4) will remain in draft format and reviewed following analysis of responses to the Strand 1 online questionnaire. Participants in Strand 2 will be sent a Participant Information Sheet (Appendix 5) and will be required to consent (Appendix 6). The risk of coercion in gaining informed consent is greatly reduced by the lack of face to face contact; consequently a witness signature will not be sought. Participants will be reminded at the start of the interview about their right to withdraw.

c) Confidentiality:

Raw data resulting from both strands will only be seen and analysed by myself. All hardcopy research data will be stored under locked conditions. All electronic data will be encoded and password protected. A university laptop will be used solely by myself, with access via personal login. Files created will be password protected and encrypted.

d) Anonymity:

Strand 1 Pilot and Strand 1 – Participants will be sought from a targeted sample of students. Although the names of participants in the sample will be known to me, their anonymity will be maintained because responses to the online questionnaire will be automatically collated within the software package.

Strand 2 - Participants who indicate their willingness to participate in Strand 2 will relinquish their anonymity by providing an email address. However, confidentiality will be maintained at all times. All participants will be given a code to protect their identity and no reference will be made during the audio recording to participants' names. Interview notes and transcripts will be given a code to

enable cross-referencing between the data. There will be no cross-reference between participant email addresses and an individual code.

Participants will be informed about the intention to publish the final thesis in the Participant Information Sheets. Those participants consenting to the Strand 2 online, audio-visual, semi-structured interview may be given further clarification as required at the beginning of the interview. Procedures to maintain confidentiality and anonymity mentioned above will ensure participants will not be identified at publication.

e) Insider Research:

Power and coercion will be a potential risk to participants and, to a lesser extent, gatekeepers. In choosing to utilise online methods of data collection the impact of power and coercion will be minimised due to the absence of face to face verbal and non-verbal communication. Participants will be sent one invitation by email to participate in Strand 1 and can choose to participate by completion of the online questionnaire. Participants who indicate their willingness to participate in Strand 2 will also be sent one email invitation and will be required to consent. The online, audio-visual, semi-structured interviews in Strand 2 will be used as an opportunity to reassure participants and their dignity and respect will be maintained. I am mindful of the potential for participants to exert their power over me as the interviewer in Strand 2. Participants will be provided with a full and open opportunity to express their views and it is my role as the researcher to represent their views as accurately as possible.

Appendix 1: Participant Information Sheet (Strand 1)

Appendix 2: Email content inviting participants to Strand 1

Appendix 3: Email content inviting participants to Strand 2

Appendix 4: Draft online, audio-visual, semi-structured interview schedule (Strand 2)

Appendix 5: Participant Information Sheet (Strand 2)

Appendix 6: Consent Form (Strand 2)

Section 5: Declaration

***Student/Staff Declaration**

By sending this form from My Anglia e-mail account I confirm that I will undertake this project as detailed above. I understand that I must abide by the terms of this approval and that I may not substantially amend the project without further approval.

****Supervisor Declaration**

By sending this form from My Anglia e-mail account I confirm that I will undertake to supervise this project as detailed above.

*Students to forward completed form to their Dissertation Supervisor/Supervisor.

** Dissertation Supervisor/Supervisor to forward the completed form to the relevant ethics committee.

29 November, 2013

Version: 4.0

Appendix 10: Strand 2 Adobe Connect email information

Dear

Thank you once again for agreeing to participate in this online interview to discuss the academic skill development opportunities available to you as a distance learning student at Anglia Ruskin University. The interview will take approximately 45 minutes, plus a few minutes at the start during which I will help you to become acquainted with the online environment.

You should check that your computer is set up properly before we start:

System Requirements:

You can access the online interview from any internet connected computer using your internet browser. You need the latest Flash player and your computer needs to be sound enabled. For active participation I recommend a webcam and headset (speakers and microphone), but a headset is not essential if you don't have one. To test if your computer supports Adobe Connect, please run the 3-step test at the following link on your computer – you do not need to download step 4: http://anglia-ruskin.adobeconnect.com/common/help/en/support/meeting_test.htm.

A visual Start Guide is also available at <https://seminars.adobeconnect.com/a227210/vqs-participants>

To join the online interview click on the following link: <http://anglia-ruskin.adobeconnect.com/yvettew/> and enter as a 'Guest' (giving your first name). Please log-in **5 – 10 minutes before the start** of the online interview, so that you can check that everything is working correctly before we start.

You will also find a document entitled 'Audio and webcam instructions for Adobe' attached to this email. You may find it helpful to print this three page document before the start of the start of the interview, or have it minimised at the bottom of your screen to enable you to refer to it.

Once again, thank you for agreeing to take part. I look forward to meeting you online!

Yvette

Appendix 11: Coding scheme

Coding	Concept
	<i>Academic skill development opportunities provided by the university</i>
UNI 01	Generic information provided by the university
UNI 02	Information provided by course tutors/module leaders
UNI 03	Information available on the web for general access
	<i>Skill support required</i>
SKILL 01	Personal/emotional support
SKILL 02	Academic support
SKILL 03	Technical support
SKILL 04	Social support
	<i>Timing and trigger points</i>
TRIG 01	Induction
TRIG 02	Skills included within modules eg: scaffolding
TRIG 03	Students directed at specific points of the year eg: feedback following assessment, start of a module
TRIG 04	Assessment task triggers students to access skill support for 'new' skills
	<i>Reasons for accessing skill support</i>
REAS 01	Embedded within a module
REAS 02	Not embedded within a module
REAS 03	Proactively sought by student
REAS 04	Remedial support suggested by a tutor
	<i>Quality of learning experience (facilitates learning)</i>
FAC 01	Tutor personal attributes
FAC 02	Tutor responsiveness
FAC 03	Contact with peers
FAC 04	'Human' aspect of support
FAC 05	VLE activities
	<i>Quality of learning experience (hinders learning)</i>
HIN 01	Tutor personal attributes
HIN 02	Tutor responsiveness
HIN 03	Time limitations for work-based learners
HIN 04	Not knowing tutors or support staff
HIN 05	Text-based learning rather than 'human' interaction
HIN 06	Inconsistency in VLE design
HIN 07	Ineffective induction
HIN 08	Lack of participation/engagement in the VLE
	<i>Motivation</i>
MOT 01	Employer/Qualification
MOT 02	Personal
MOT 03	Self-directed/Autonomous
MOT 04	Progression
	<i>Contribution to learning</i>
CONT 01	Contextualised
CONT 02	Application to work
CONT 03	Reflective practice
CONT 04	Confidence

Appendix 12: Frequency of students' access to academic skill development opportunities (strand 1)

	Frequency					Central Tendency	
	Never n (%)	Rarely n (%)	Sometimes n (%)	Often n (%)	Always n (%)	Median	Mode
Librarian Support (n=41)	20 (46.5%)	13 (30.2%)	4 (9.3%)	4 (9.3%)	0	Rarely	Never
Library Online Guides (n=40)	9 (20.9%)	11 (25.6%)	12 (27.9%)	7 (16.3%)	1 (2.3%)	Rarely	Sometimes
Student Services Online Guides (n=40)	17 (39.5%)	10 (23.3%)	8 (18.6%)	4 (9.3%)	1 (2.3%)	Rarely	Never
Student Services Tutorials (n=41)	26 (60.5%)	6 (14.0%)	4 (9.3%)	4 (9.3%)	1 (2.3%)	Never	Never
IT Helpdesk (n=41)	16 (37.2%)	15 (34.9%)	8 (18.6%)	2 (4.7%)	0	Rarely	Never
Email Contact with Tutors (n=41)	0	2 (4.7%)	15 (34.9%)	19 (44.2%)	5 (11.6%)	Often	Often
Submitting Draft Work for Formative Feedback (41)	3 (7.0%)	4 (9.3%)	15 (34.9%)	14 (32.6%)	5 (11.6%)	Sometimes	Sometimes
Formative Feedback Following Assessment (42)	3 (7.0%)	2 (4.7%)	15 (34.9%)	11 (25.6%)	11 (25.6%)	Often	Sometimes
VLE Discussion Forum (n=38)	2 (4.7%)	4 (9.3%)	6 (14.0%)	15 (34.9%)	11 (25.6%)	Often	Often
Telephone Tutorials with Tutors (n=40)	23 (53.5%)	4 (9.3%)	9 (20.9%)	4 (9.3%)	0	Never	Never
Online Chat eg: Skype/MSN Messenger with Tutors (n=42)	25 (58.1%)	1 (2.3%)	11 (25.6%)	4 (9.3%)	1 (2.3%)	Never	Never
Adobe Connect Audio Visual Tutorials (n=40)	31 (72.1%)	1 (2.3%)	5 (11.6%)	2 (4.7%)	1 (2.3%)	Never	Never
Videos (n=41)	18 (41.9%)	9 (20.9%)	7 (16.3%)	5 (11.6%)	2 (4.7%)	Rarely	Never
Internet Resources (n=42)	0	7 (16.3%)	2 (4.7%)	14 (32.6%)	19 (44.2%)	Often	Always

Appendix 13: Student satisfaction with academic skill development opportunities (strand 1)

	Frequency					Central Tendency	
	Not At All Satisfied n (%)	Slightly Satisfied n (%)	Moderately Satisfied n (%)	Very Satisfied n (%)	Completely Satisfied n (%)	Median	Mode
Librarian Support (n=34)	8 (18.6%)	1 (2.3%)	8 (18.6%)	10 (23.3%)	7 (16.3%)	Moderately Satisfied	Very Satisfied
Library Online Guides (n=37)	3 (7.0%)	2 (4.7%)	16 (37.2%)	11 (25.6%)	5 (11.6%)	Moderately Satisfied	Moderately Satisfied
Student Services Online Guides (n=34)	6 (14.0%)	2 (4.7%)	14 (32.6%)	10 (23.3%)	2 (4.7%)	Moderately Satisfied	Moderately Satisfied
Student Services Tutorials (n=29)	4 (9.3%)	4 (9.3%)	11 (25.6%)	7 (16.3%)	3 (7.0%)	Moderately Satisfied	Moderately Satisfied
IT Helpdesk (n=33)	4 (9.3%)	1 (2.3%)	8 (18.6%)	13 (30.2%)	7 (16.3%)	Very Satisfied	Very Satisfied
Email Contact with Tutors (n=41)	1 (2.3%)	2 (4.7%)	7 (16.3%)	17 (39.5%)	14 (32.6%)	Very Satisfied	Very Satisfied
Submitting Draft Work for Formative Feedback (40)	1 (2.3%)	1 (2.3%)	7 (16.3%)	19 (44.2%)	12 (27.9%)	Very Satisfied	Very Satisfied
Formative Feedback Following Assessment (38)	2 (4.7%)	2 (4.7%)	8 (18.6%)	16 (37.2%)	10 (23.3%)	Very Satisfied	Very Satisfied
VLE Discussion Forum (n=39)	2 (4.7%)	2 (4.7%)	5 (11.6%)	16 (37.2%)	14 (32.6%)	Very Satisfied	Very Satisfied
Telephone Tutorials with Tutors (n=29)	7 (16.3%)	3 (7.0%)	5 (11.6%)	5 (11.6%)	9 (20.9%)	Moderately Satisfied	Completely Satisfied
Online Chat eg: Skype/MSN Messenger with Tutors (n=30)	6 (14.0%)	4 (9.3%)	6 (14.0%)	6 (14.0%)	8 (18.6%)	Moderately Satisfied	Completely Satisfied
Adobe Connect Audio Visual Tutorials (n=30)	11 (25.6%)	5 (11.6%)	6 (14.0%)	6 (14.0%)	2 (4.7%)	Slightly Satisfied	Not At All Satisfied
Videos (n=33)	7 (16.3%)	4 (9.3%)	7 (16.3%)	12 (27.9%)	3 (7.0%)	Moderately Satisfied	Very Satisfied
Internet Resources (n=40)	3 (7.0%)	1 (2.3%)	6 (14.0%)	20 (46.5%)	10 (23.3%)	Very Satisfied	Very Satisfied

Appendix 14: Contribution made by academic skill development opportunities to students' academic development (strand 1)

	Frequency					Central Tendency	
	Strongly Disagree n (%)	Disagree n (%)	Neither Agree nor Disagree n (%)	Agree n (%)	Strongly Agree n (%)	Median	Mode
Librarian Support (n=35)	4 (9.3%)	3 (7.0%)	8 (18.6%)	11 (25.6%)	9 (20.9%)	Agree	Agree
Library Online Guides (n=37)	3 (7.0%)	2 (4.7%)	9 (20.9%)	16 (37.2%)	7 (16.3%)	Agree	Agree
Student Services Online Guides (n=36)	4 (9.3%)	4 (9.3%)	9 (20.9%)	14 (32.6%)	5 (11.6%)	Agree	Agree
Student Services Tutorials (n=34)	5 (11.6%)	3 (7.0%)	15 (34.9%)	8 (18.6%)	3 (7.0%)	Neither Agree/Disagree	Neither Agree/Disagree
IT Helpdesk (n=36)	2 (4.7%)	7 (16.3%)	8 (18.6%)	13 (30.2%)	6 (14.0%)	Agree	Agree
Email Contact with Tutors (n=39)	0	1 (2.3%)	0	10 (23.3%)	28 (65.1%)	Strongly Agree	Strongly Agree
Submitting Draft Work for Formative Feedback (38)	0	1 (2.3%)	1 (2.3%)	11 (25.6%)	25 (58.1%)	Strongly Agree	Strongly Agree
Formative Feedback Following Assessment (38)	1 (2.3%)	0	5 (11.6%)	9 (20.9%)	23 (53.5%)	Strongly Agree	Strongly Agree
VLE Discussion Forum (n=35)	0	3 (7.0%)	2 (4.7%)	11 (25.6%)	19 (44.2%)	Strongly Agree	Strongly Agree
Telephone Tutorials with Tutors (n=31)	3 (7.0%)	0	11 (25.6%)	4 (9.3%)	13 (30.2%)	Agree	Strongly Agree
Online Chat eg: Skype/MSN Messenger with Tutors (n=32)	3 (7.0%)	1 (2.3%)	13 (30.2%)	5 (11.6%)	10 (23.3%)	Neither Agree/Disagree	Neither Agree/Disagree
Adobe Connect Audio Visual Tutorials (n=32)	3 (7.0%)	2 (4.7%)	16 (37.2%)	6 (14.0%)	5 (11.6%)	Neither Agree/Disagree	Neither Agree/Disagree
Videos (n=33)	2 (4.7%)	1 (2.3%)	11 (25.6%)	12 (27.9%)	7 (16.3%)	Agree	Agree
Internet Resources (n=38)	0	1 (2.3%)	5 (11.6%)	11 (25.6%)	21 (48.8%)	Strongly Agree	Strongly Agree

Appendix 15: Coding scheme development chart

Development phases of analytic framework	Explanation and description of changes made to coding scheme
<p><i>Coding Scheme Version 1 (1.6.15):</i> After conducting the literature review the conceptual framework was devised.</p>	<p>Five key categories were identified following review of the literature and in light of personal experience. The categories also relate to the research questions:</p> <ul style="list-style-type: none"> • Academic skill development opportunities provided by the university • Skill support required • Timing and trigger points • Reasons for accessing skill support • Quality and contribution to learning <p>These categories were subdivided by descriptors. At the outset a total of 15 descriptors were included.</p>
<p><i>Coding Scheme Version 2 (8.6.15):</i> Following the first manual coding of interview transcripts two further key themes were added with descriptors. One key category was edited. Existing descriptors were also edited and added to.</p>	<p>During the first manual coding, notes and 'pencil' edits were made on the framework as students' views emerged. From this seven key categories were identified:</p> <ul style="list-style-type: none"> • Academic skill development opportunities provided by the university • Skill support required • Timing and trigger points • Reasons for accessing skill support • Quality of learning experience • Motivation • Contribution to learning <p>'Quality and contribution to learning' was edited from version 1 to 'Quality of learning experience (Facilitates learning)', 'Quality of learning experience (Hinders learning)' and 'Contribution to learning'. Descriptors for these categories were added and descriptors were added to the existing categories.</p> <p>This version of the framework led to the development of the coding scheme. At this point there were 36 descriptors.</p>
<p><i>Coding Scheme Version 3 (8.6.15):</i> After coding the transcripts in NVivo it became apparent that some categories were not used.</p>	<p>It was decided at this point to retain version 2 of the framework until further analysis had taken place in case new interpretations became evident.</p>

Adapted from Bloomberg and Volpe (2008, p. 198)

Appendix 16: Strand 2 interview question matrix

Interview question	Research question(s)	Possible coding scheme concepts
1. Do you attend campus for any aspect of your course?		
2. Please explain what you understand by 'academic skills'.		Skill Support Required
3. How did you find out about the various academic skill development opportunities that are available to you?	1	Timing and Trigger Points
4. How did you decide which academic skill development opportunities to access or make use of?	1 and 2	Academic Skill Development Opportunities Provided by the University
5. Were there specific points during a term when you would access various opportunities?	3	Timing and Trigger Points
6. Are academic skill development opportunities part of your course curriculum within different modules?	3 and 4	Reasons for Accessing Skill Support; Timing and Trigger Points
7. To what extent is the 'human' aspect of study skill support important to you?		Quality of Learning Experience (Facilitates/Hinders Learning)
8. Why have you used the various academic skill development opportunities that are available to you?	4	Reasons for Accessing Skill Support; Timing and Trigger Points
9. In what ways have the various academic skill development opportunities you have used contributed to your academic development?	5	Contribution to Learning;
10. What motivates you during your studies?		Motivation
11. Can you think of any other academic skill development opportunities which might improve the student experience for distance learning students?		

Appendix 17: Students' use of internet resources by level of study

Q6n: Which of these academic skill development opportunities have you made use of? - Internet resources * Q1: Which level of course are you studying? Cross-tabulation

Q6n: Which of these academic skill development opportunities have you made use of? - Internet resources	Q1: Which level of course are you studying?			Total
	Foundation Degree	Bachelor Degree	Masters' Degree	
Yes	17	9	11	37
No	2	1	0	3
Not available	0	1	0	1
Total	19	11	11	41

Appendix 18: Coding summary table

Interviewee	Reasons for accessing skill support			
	REAS 01 Embedded within a module	REAS 02 Not embedded within a module	REAS 03 Proactively sought by student	REAS 04 Remedial support suggested by tutor
01				
02			<p>Reference 1 - 2.08% Coverage</p> <p>I just couldn't get my head around the concept of it so after having read the guide I looked at the time table, it fit in with what I was doing at work that day so I popped along, it was only for an hour and it was really beneficial actually. So that kind of prompted me to then go to another one that I found really relevant and to suggest them to a couple of others that I knew were struggling.</p>	<p>1 reference coded [3.93% Coverage]</p> <p>Reference 1 - 3.93% Coverage</p> <p>Not really. I've always been in the position where I've submitted something knowing it wasn't my strongest section. If they've commented on it afterwards then I've always kind of known beforehand and perhaps thought I should have asked them about this before I've submitted it because I know that that section perhaps wasn't</p>

			<p>Reference 2 - 1.38% Coverage</p> <p>I guess mine were quite reactive rather than proactive so it was, if I felt I was struggling with something or not fully grasping a concept of something then I would seek extra help for it rather than thinking right I've got a module coming up which includes this,</p> <p>Reference 3 - 0.55% Coverage</p> <p>Or if I've gone to them and sort of said I'm doing the assignment but I'm just not grasping this concept.</p> <p>Reference 4 - 1.16% Coverage</p> <p>Yes a couple of times when I've had questions about the assignment as to am I doing</p>	<p>as good as it should have been. So it's never been a surprise. I think if it had been a surprise and then they'd have said right you need to go and learn some more about this, I think depending on how it was delivered, it may have been a bit sensitive but no, I've never really been surprised by it to be honest. So it's always kind of been a welcome discussion because it's something I've known that I can definitely improve on.</p>
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			the right thing with my drafts and things like that or whether I've wanted to send a draft off, I've often sent it to their email address.	
03	<p>Reference 1 - 0.47% Coverage</p> <p>I really feel it was always available in the module as an instruction.</p>	<p>Reference 1 - 0.27% Coverage</p> <p>I wouldn't say we were taught skills no.</p>	<p>Reference 1 - 0.55% Coverage</p> <p>Not only to get to the end point of the course but to also to further my knowledge.</p>	
04	<p>Reference 1 - 1.21% Coverage</p> <p>I think I was just, I wouldn't say thorough but I didn't want to ignore any of the advice so I reviewed it all, all the advice I was directed to I made sure I reviewed and if it made sense then I guess the level of review was less.</p> <p>Reference 2 - 1.07% Coverage</p> <p>If it didn't make any sense then I would be more thorough in what I was reading about. I didn't want to lose marks or</p>			

	<p>struggle simply because of not spending the time required to look at all the material.</p> <p>Reference 3 - 2.88% Coverage</p> <p>So we were shown the module guide, which would explain the learning outcomes. There'd be a calendar, week by week tutorial which would guide us towards the patches that we needed to do and then it became evident that to submit the module, you bring all your patches together and then write a final stitching patch and then there was a preparation week for making it ready for assessment and another week for proof reading and so on. So it was firm guidance on when to do each thing. We were also directed to look at the references at various times.</p> <p>Reference 4 - 0.90% Coverage</p>			
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	I think it was always to achieve what was described in the learning outcomes. So if there hadn't been a requirement to do it for the course, I wouldn't have sorted it out.			
05	<p>Reference 1 - 1.97% Coverage</p> <p>think it was one of the very first modules in the first year so that was distance learning, no that wasn't distance learning that was lenders learning, in a classroom setting where we did precisely what I've just explained really where you'd be asked to write about something and then told right, now write the same thing but 20 words, so it's just the sorts of words that you use, the words that you leave out, so it was very definitely a taught skill.</p>	<p>Reference 1 - 0.62% Coverage</p> <p>I'm sure I could have found out for myself where study skill sessions were happening in the final year, but no-one sort of ever pointed it out.</p>		<p>Reference 2 - 0.67% Coverage</p> <p>but there was feedback to say the referencing was poor, I can't remember if it was poor or could be improved or what it was, and I thought how stupid I am</p> <p>Reference 3 - 2.47% Coverage</p> <p>Yeah, it just made me feel very stupid. I'm not criticising the comment because the comments were necessary because the heart of the referencing was poor, but it just made me think, you know, at the end of the</p>

				day you've got to, to a certain degree, toe the line here and you've got to follow certain things and if the referencing is that important then you'd better start taking it seriously and learning how to do it properly, and so from then on in I've had absolutely no issues and it has been that study skills document that has kept me on the straight and narrow.
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